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REPORT

OF THE

DEPARTMENT OF MINES

OF PENNSYLVANIA

Part I Anthracite

1907

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LETTER OF TRANSMITTAL

Department of Mines,
April 1, 1908.

To His Excellency, Edwin S. Stuart, Governor of Pennsylvania:

Sir: In compliance with the Act of Assembly of April 14, 1903, I beg to submit herewith, for transmission to the General Assembly, the report of the Department of Mines for the year ending December 31, 1907. Part I covers in detail the operations in the twenty Anthracite Districts; Part II the operations in the twenty Bituminous Districts, as returned by the Inspectors. Observations and suggestions are also offered relative to mining subjects.

Respectfully submitted,

JAMES E. RODERICK,

Chief of Department of Mines.

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REPORT

OF THE

DEPARTMENT OF MINES

INTRODUCTION

The year 1907 will be recorded as one of the most remarkable, in a commercial sense at least, in the annals of American history. Business in all branches reached an unprecedented condition of expansion, a condition undreamed of by even the most sanguine minds.

The great wave of prosperity, however, was brought to an abrupt termination in the late fall and a general collapse of activity resulted, November and December showing a marked contrast to the earlier months of the year in the volume of business. But notwithstanding the unfortunate conditions at the close of the year, the year, taken as a whole, was extremely successful. The record in the coal trade was especially remarkable. The production in Pennsylvania reached the unusual volume of 235,615,459 net tons, of which the bituminous region produced 149,559,047 tons, and the anthracite region 86,056,412 tons. This production exceeded the great production of 1906 by 33,942,960 tons, and is five times as great as that of any other state of the Union, and over 83 per centum of the tonnage of Great Britain. The tonnage of the world for 1907 is estimated at 1,400,300,000 net tons. The United States produced 469,866,266 tons; Great Britain, 299,967,669 tons; Germany, about 200,000,000 tons of coal and lignite; France, 35,000,000 tons; Belgium, 25,000,000 tons. Until recently Great Britain has been the largest coal producing country in the world, but in 1899 the United States forged to the front, and last year exceeded the production of Great Britain by about 170,000,000 tons.

The Anthracite trade ended the year in a condition very satisfactory to the operator. Not only was the production the greatest in the history of the trade, exceeding that of any previous year by 11,000,000 tons, but ready sale was found for practically all of it, and at the close of the year the stock on hand had been reduced to a minimum. Prices were good and labor questions did not offer any impediment to trade. All things considered, no other great industry can equal the record of the Anthracite industry for 1907.

The year 1908 will, no doubt, show a decreased production with a retention of fair prices. A cessation in mining activity will not greatly disturb the equanimity of the mine owners, as they fully realize their fortunate position in having a commodity that is indispensable to the business interests of the country. They know that it gains in value every year, and therefore they can wait with a degree of complacency for a market. The coal trade, being a basic industry, must go on regardless of periods of depression, and while it is unquestionably benefited by increased demand, it is, on the other hand, never utterly cast down by depression.

It is possible that the exportation of coal in appreciable quantities is not far distant. The higher prices becoming prevalent in Great Britain lead to this conclusion, and it seems to be mainly a question of a supply of vessel tonnage that confronts the American operator.

The Pennsylvania mining industry is in most excellent condition. The equipment and management of most of the mines are up to date, and great effort has been made in recent years to render the mines safe for the workmen and at the same time to give better protection to property.

The future annual production in Pennsylvania will continue for many years at probably 200,000,000 tons. It is estimated that 7,000,000,000 tons still remain unmined in the Anthracite region, and in the Bituminous region, while no estimates have been made, the supply at the present rate of consumption will no doubt last several hundred years.

The subject of accidents is inseparable from a consideration of the mining industry, and on account of the great disasters that have occurred recently unusual attention has been given to the causes of such catastrophies and the methods of prevention. This phase of the industry is discussed in other articles that appear in this report. However, after the last word has been said regarding the causes of accidents and the best means of prevention, it still remains an indisputable fact that over one-half of all fatalities result from carelessness on the part of the victims or on the part of others, and such being the case, the statement must go unchallenged that the loss of life, deplorable as it is, will continue until the workmen themselves and those in charge of the workmen learn to exercise greater care or are better fitted for their work. Familiarity with danger breeds a spirit of recklessness or indifference, and this condition, coupled with the ignorance of the workmen, who in most cases do not understand the English language, adds an unusual hazard to an occupation that at best is notoriously dangerous.

FUND FOR THE RELIEF AND SUPPORT OF WIDOWS AND ORPHANS AND FOR DISABLED EMPLOYES

The bill introduced in the National Congress to provide a tax on coal in the several States, for the purpose of raising a fund to be used in giving aid and support to the widows and orphans of the persons killed in and about the mines, is intended to serve a most laudable purpose. The suggestion, however, is made here that a better way to accomplish the purpose of this bill and at the same time adopt a plan that would be fairer to Pennsylvania, would be to have the State levy an annual tax of three-quarters of a cent a ton on all bituminous coal sent to market or used in the manufacture of coke, and a tax of one and one-half cents a ton on all Anthracite coal sent to market. I have advocated a plan of this kind for more than twenty-five years, and in former reports I have urged the Legislature to act in the matter. I now sincerely hope that at the next session a bill will be passed similar to the one recently introduced in the National Congress.

In dealing with this matter it might be well to separate the two great coal regions of the State. In the Anthracite region, with an annual taxable production of 62,000,000 tons, yielding a tax of one and one-half cents a ton, the fund would be $930,000. The loss of life in the Anthracite mines averages about 573 a year, leaving about 322 widows and 770 orphans. In the Bituminous region from which an annual taxable production of at least 100,000,000 tons may be expected during the next hundred years, the fund at three-quarters of a cent a ton, would be about $750,000. The loss of life in the Bituminous mines averages about 475 a year, leaving about 252 widows and 546 orphans. Each widow should receive $100 to defray the funeral expenses and a weekly benefit of $3 during widowhood, and each child under fourteen years of age should receive a weekly benefit of $2.

To care for persons injured in the mines, a portion of the fund in each region, approximately $100,000, could be distributed annually. During disablement each person should receive an amount equal to one-half his daily or weekly earnings, the benefit not to become operative until one week from the date of injury and to continue until he is able to resume work; but in no case should the benefit continue for more than one year. The annual expense entailed by the plan herewith proposed is shown in the following table.

RELIEF FUND FOR WIDOWS AND ORPHANS AND DISABLED EMPLOYES

Anthracite Region of Pennsylvania

Annual Contribution of Coal Companies $930,000.00

(One and a half cents a ton on an estimated production of 62,000,000 tons.)

	1st Year	2nd Year	3rd Year	4th Year	5th Year	6th Year	7th Year
Contribution,	$930,000 00	$930,000 00	$930,000 00	$930,000 00	$930,000 00	$930,000 00	$930,000 00
Balance,	....	632,188 00	1,168,659 52	1,614,893 90	1,976,589 66	2,259,673 25	2,470,308 18
Interest,	....	25,287 52	46,716 38	64,595 76	79,063 59	90,386 93	98,812 33
Principal,	$930,000 00	$1,587,475 52	$2,145,405 90	$2,609,489 66	$2,985,653 25	$3,280,060 18	$3,499,120 51
Paid out,	297,812 00	418,816 00	530,512 00	632,900 00	725,980 00	809,752 00	884,216 00
Balance,	$632,188 00	$1,168,659 52	$1,614 893 90	$1,976,589 66	$2,259,673 25	$2,470,308 18	$2,614,904 51

	8th Year	9th Year	10th Year	11th Year	12th Year	13th Year	14th Year
Contribution,	$930,000 00	$930,000 00	$930,000 00	$930,000 00	$930,000 00	$930,000 00	$930,000 00
Balance,	2,614,904 51	2,700,128 69	2,732,913 84	2,720,470 39	2,670,297 21	2,590,193 10	2,488,268 82
Interest,	104,596 18	108,005 15	109,316 55	108,818 82	106,811 89	103,607 72	99,530 75
Principal,	$3,649,500 69	$3,738,133 84	$3,772,230 39	$3,759,289 21	$3,707,109 10	$3,623,800 82	$3,517,799 57
Paid out,	$949,372 00	1,005,220 00	1,051,760 00	1,088,992 00	1,116,916 00	1,135,532 00	1,144,840 00
Balance,	$2,700,128 69	$2,732,913 84	$2,720,470 39	2,670,297 21	2,590,193 10	2,488,268 82	2,372,959 57

In arriving at the number of widows to be taken care of each year, it is assumed that by death and remarriage the number will be constantly depleted at an average rate of, say, 23 a year out of each 322. This means that the 322 provided for in the first year will be reduced to 299 in the second year, and 276 in the third year, and so on. Each annual series of beneficiaries is treated in the same way, and by this method at the end of fourteen years the first 322 will have passed beyond the period of relief either by death or remarriage. Of course there will be exceptional cases where widows may live for many years unmarried and will have to be taken care of, but the average number to be taken care of will in all probability not be as great as given in the table.

In dealing with the orphans it is assumed that an average number of 55 out of each 770 will annually pass out of the beneficiary period by reaching the age of fourteen years or by death. It will be understood, of course, that when children reach the age of fourteen they are no longer recipients of any portion of this fund. Taking 770 children for the first year there will be among that number children of all ages from 1 to 13. Those who are 13 years of age will pass out in one year, those who are 12, in two years, and so it will continue until at the end of fourteen years the number passing out will equal the number coming in.

In estimating the amount to be paid injured workmen the number injured in 1907 is taken as a basis. The number is about 1,200. The average wage is $500 a year, and during disability the injured are to receive one-half pay. Practically all of the 1,200 will receive the benefit for one week and after that the number will diminish gradually for almost a year when all but the permanently disabled will have ceased to be beneficiaries. It is difficult to state even approximately what amount would be required each year for this purpose, but $100,000 would no doubt be an ample fund.

The tax on coal could be remitted by the operators to the State through some one designated by an act of the Legislature to receive the funds. The money could then be turned into the State Treasury and be subject to disbursement on properly drawn warrants or pay rolls. Investment of any excess funds should be made by the Governor and State Treasurer and the person who shall have charge of the disbursement of the fund.

As the operation of such a plan as has been briefly outlined would entail a great deal of clerical work and require careful attention, it is suggested that the work be done by the Department of Mines. All the data relating to the accidents that occur in the mines are filed in the Department, and it would seem appropriate to place this important work under that Department. The expense of conducting the work, including the clerical force and incidental expenses, would not exceed $10,000 a year.

A tax on coal as suggested, for the benefit of widows and orphans and injured persons, would do away with law suits and damages and make unnecessary an Employers' Liability Act; and the system of distribution suggested would do away with all collections at the mines for the purpose of giving aid, and it would be a great relief to the prudent and careful miner who is constantly being called upon to help the heedless and the extravagant.

No doubt some of the operators will object to the payment of this tax, claiming that it will make the cost of production somewhat greater, but we do not think this argument will carry much weight, as the additional cost of production will eventually have to be paid by the consumer, and as evidence of how small the amount would be to the consumer, it is only necessary to consider a few figures. The person who consumes ten tons of coal in a year will have an additional expense of but fifteen cents; the person who uses forty tons of coal a year will have an additional expense of sixty cents. These figures are trifling and it is only when the tax is taken in its totality that the figures are impressive.

Undoubtedly most excellent results would follow the adoption of a system of taxation similar to the one here suggested. The miners now working in this State would be more willing to remain, and unless the other coal States adopted an equally acceptable system many of the best miners would find their way to the Pennsylvania mines. It would be a blessing, indeed, if more of the intelligent miners could be induced to come to Pennsylvania, as there is a scarcity in this State of qualified workmen, at least sixty per centum of them being unable to speak or even understand the English language. I am not opposed to the foreigner, as I am one myself, but I am most decidedly opposed to ignorant foreigners working in gaseous mines, where through lack of knowledge they may bring disaster to themselves and their fellow-workmen. Educate the foreigner first, and he then makes a good miner and a good citizen. It is more than probable, as a consequence of the adoption of relief measures in Pennsylvania, that West Virginia, Ohio and Illinois would be forced to enact like measures, and thus the ultimate result of our suggestion would be a more satisfactory condition of affairs for all persons concerned in this great industry.

DUTIES OF INSPECTORS

The inspectors of the Anthracite region spent 3,077 days inspecting the inside workings of the mines; 571 days investigating accidents; 146 days attending inquests; 392 days in consultation on mining matters; 23 days in consultation on legal matters; 8 days at mine fires; 126 days examining mine foremen; 54 days attending court; 134 days examining surface conditions of plants; 93 days traveling on duty; 130 days sick at home; 25 days attending funerals; 130 days on vacation; 102 holidays.

The days not enumerated were devoted to office work and other duties that required attention. Every day the inspectors make a complete record of the day's work in their narrative report, which at the end of the month is forwarded to the department. They also make quarterly reports of all inspections made of the mines, giving the conditions as found and stating what action has been taken to remedy defects, if any exist. They report monthly all accidents that occur, and also consume considerable time in consultation with persons who call upon matters pertaining to mining.

THE EMPLOYMENT AGE OF CHILDREN IN THE ANTHRACITE COAL MINES

It is well known to all persons interested, that is, parents, guardians, superintendents, foremen and inspectors, that the legal employment age of children inside of the Anthracite mines is 16 years, and outside, 14 years. For the benefit of those who are not familiar with the law we quote herewith from the Act of 1905:

> "It shall be unlawful for any person, firm, copartnership or corporation to employ any minor child, under the age of sixteen years, inside of any Anthracite coal mine, or to employ any minor child, under the age of fourteen years, in any Anthracite coal breaker or colliery, or around the outside workings of any Anthracite coal mine.
>
> "It shall be the duty of the Chief of the Department of Mines of this Commonwealth, and the right of any citizen of this Commonwealth, in the name of the Commonwealth of Pennsylvania, upon any violation of the provisions of section one of this act, to bring suit in the court of common pleas of the county wherein said offense or violation occurred."

The newspapers in several of the coal counties, especially Lackawanna, have from time to time charged the inspectors with neglecting to enforce a strict compliance with this provision of the law, omitting, strange to say, any reference to the right or responsibility of other persons in this connection.

A careful investigation of the charges against the inspectors was made in December, 1906, and they were found to be without any foundation in fact, as the inspectors, without exception, reported to the department that no boy without a proper age certificate was employed in or about the mines. They also stated that before being employed every boy was required to deposit with the foreman of the mine a sworn statement signed by his parents or guardian to the effect that he was of employment age. It is probable, however, that some of these certificates did not give the correct age of the boys. An article attacking the Department of Mines and Inspectors generally on this question appeared in a Scranton paper, and Mr. Cummings, Superintendent of Schools at Olyphant, was quoted as authority for the charges made. It may be stated here that it was as much the duty of Mr. Cummings, if he knew of any violation, to make complaint in this case as it was the duty of the Inspectors. The only way the Chief of the Department of Mines can know of violations of this law is by being informed by persons who know the facts. However, the Department immediately addressed to the inspectors the following letter:

August 31, 1907.

Dear Sir:

Confirming my verbal instructions given at a meeting held at Scranton on the 28th instant, you are hereby directed to make a special effort to find out if the Child Labor Law is being violated in your district. If you find any such violation by superintendents, foremen, or others employing labor, or by Aldermen, Justices of the Peace, Notaries Public, parents or guardians in your district, you are hereby directed to make report thereof immediately to John R. Jones, Attorney-at-Law, Connell Building, Scranton, who is authorized to prosecute the guilty parties.

The following letter was also addressed to Attorney John R. Jones on the same date:

Mr. John R. Jones,
Attorney-at-Law,
Scranton, Pa.

Dear Sir:

I am sorry that I did not find you at your office on the afternoon of the 28th instant. The Department has heard rumors to the effect that the Child Labor Law is being violated, especially in Lackawanna county. The following is a part of an article that appeared in a recent issue of one of the Scranton newspapers:

"The decrease of enrollment of scholars is undoubtedly owing in part at least, to the laxity of the employers of child labor in obeying the law of May, 1905, since the decision of the Supreme Court declaring portion of the act requiring an educational qualification as a requisite for legal employment, unconstitutional. This decision took the issuing of employment certificates out of the hands of the school authorities and restored it to Justices of the Peace, with the result that dozens of boys are to-day employed in the mines and breakers who have not attained the legal school age.

Mr. Roderick, Chief of the Department of Mines, in his report to the Governor, stated that there were no violations of the Child Labor Law in the mines and breakers under his jurisdiction. Yet at the time of making this report Mr. Roderick should know that right here in Olyphant, within less than thirty days, a boy who had not yet reached his fifteenth year was killed in the mines, while he was regularly employed therein. Nor is this the only case. If Mr. Roderick will come in person to Olyphant, or send his legal representative here, I will guarantee to find him at least one dozen violations of the Child Labor Law.

Could the Child Labor Law be obeyed in a proper spirit by parents and employers, the enforcement of the compulsory attendance law would be an easy matter, but since both laws are being violated with impunity, and since the means of enforcing the former has been taken from the school authorities, it behooves us to use every power given us by law to carry out the provisions of the latter. This we can now do with more hope of success, inasmuch as the past Legislature made several important amendments to the compulsory attendance law. These amendments provide for the inspection of employment certificates by the school authorities, for the punishment of employers of child labor by fine or imprisonment for violations of the law, and authorizing the attendance officer and superintendent to insist on the dismissal of such children from employment until their parents establish their right to be absent from school on appeal to the courts."

Mr. Cummings, I understand, is the Superintendent of Schools at Olyphant, and I hope a trustworthy man. If you are not otherwise engaged, I should be pleased to have you represent the Department of Mines in prosecuting any known violations of the Child Labor Law in your county. I respectfully suggest that you as my representative call on Mr. Cummings, and if he can substantiate his charges you are hereby instructed to enter prosecution at once. I have instructed the Inspectors to give you all possible aid in the matter.

Very truly yours,
(Signed) JAMES E. RODERICK,
Chief of the Department of Mines.

Mr. Jones accepted the offer to represent the Department of Mines to prosecute all violators of the Child Labor Law and has been collecting evidence in regard to this matter and we give herewith as an example a synopsis of an inquest inquiring into the death of Patrick Kearney, a boy of less than ten years of age, employed at the Greenwood Washery of the Delaware and Hudson Company.

Commonwealth of Pennsylvania, }
Lackawanna County, } ss.

An inquisition indented and taken at the city of Scranton, Pa., in the County of Lackawanna, the 27th day of November, in the year of our Lord, one thousand nine hundred and seven, before me, James Stein, M. D., Coroner of the county aforesaid, upon the view of the body of Patrick Kearney, then and there lying dead, upon the oaths of Patrick Higgins, David Stanford, George Morgan, M. J. O'Neill, John J. O'Connor and Thomas J. Philbin, good and lawful men of the county aforesaid, who, being duly sworn and affirmed to inquire on the part of the Commonwealth, when, how and where and after what manner the said Patrick Kearney came to his death, do say, upon their oaths and affirmation, respectively, that there was strong suspicion of violence, such as to make an inquest necessary.

One of the witnesses, John Wallace, after being duly sworn, testified that he was 27 years of age and was assistant foreman at the Greenwood Washery and also had charge of the machinery. He said that he did not know the age of the boy, but that the Company had a certificate showing him to be 14 years of age. He had employed the boy and said that he appeared to be "about ten years of age." He also stated that he had employed the boy on the strength of the certificate. The mother of the boy had told him that he was 14 years old, but when the certificate was shown him he did not ask his age. In answer to further questioning, he stated that he thought the boy was 14 years of age and that he had taken his father's word for it. He said, "he was kind of a small boy, but I thought he might be older than he looked."

Mr. Wallace stated further that he did not think there were any other boys under 14 years of age at work in the breakers. In regard to the Kearney boy, Wallace said that as the boy had a certificate he did not make a close investigation. Mr. Wallace said the certificate was received from Squire James J. Powell, but, as the company had given orders in the previous January to get rid of all the certificates, he did not know how the present certificate came to be used on the 8th of April unless the boy had been working somewhere else.

The father of the boy, Thomas Kearney, stated that the boy was born June 18, 1898, and was killed when he was 9 years and 5 months old; that he was a large boy for his age. He said the boy had gone to work for the company September 6, 1907, after receiving a certificate from James J. Powell, of Minooka. Mr. Kearney took the boy to the Justice, and in answer to the question of the Justice regarding his age he stated, under oath, that he was 14 years old. He made this statement because he wanted to get work for the boy. The Justice had read the certificate to him and he knew perfectly well what he was doing.

Mrs. Kearney, the mother of the boy, said that she had advised getting the certificate, but did not understand much about it. She admitted that she knew it was not right to send him to work so young, but said they needed the money. She did not know that it was necessary for her husband to make an affidavit as to the age of the boy, and she said that he had not explained the matter to her. She had not read the certificate, but knew that it contained the statement that Patrick was 14 years of age. Her plea was that the family was large and they could not get along very well on her husband's earnings.

The following is a copy of the certificate of employment:

"This is to certify that I, the undersigned, am the legal guardian of Patrick Kearney; that he is over fourteen years of age, and under the Act of Assembly approved the 30th day of June, A. D. 1885, and the supplements thereto, and the Act, approved the 13th day of May, 1903, is not lawfully prohibited from being employed in and about the mines.

In consideration of his employment I, Thomas Kearney, as his legal guardian do hereby release and forever discharge any foreman, operator, owner or owners who may employ him in or about his or their mines from any and all liability for or on account of damages of any nature whatsoever that may arise by reason of him or them employing the said Patrick Kearney in and about his or their coal mines, under any Act of Assembly of the Commonwealth of Pennsylvania.

In witness whereof I have hereunto set my hand and seal, this 8th day of April, A. D. 1907.

THOMAS KEARNEY.

In the presence of
JAMES J. POWELL.

State of Pennsylvania }
County of Lackawanna. } ss.

On the 8th day of April, A. D. 1907, before me a Justice personally appeared Thomas Kearney to me known to be the individual described in the foregoing release, and being duly sworn according to law deposes and says that the facts set forth therein are true and correct. Witness my hand and official seal the day and the year aforesaid.

J. J. POWELL,
Notary Public and Justice of the Peace.

My commission expires May 1, 1908."
(SEAL)

After hearing many witnesses in the matter the jury brought in the following verdict:

"We, the undersigned, Jurors, empanelled to inquire into the cause and manner of death of Patrick Kearney, find that he came to his death November 6th, 1907. After carefully viewing the place of accident we are of the opinion that the boy fell into the chute and was drawn into the rolls. * * * * *

We cannot condemn too emphatically the practice of some parents and some guardians of minor children in making false statements to Justices of the Peace or other persons administering oaths, as to the ages of such minor children, and we also emphatically denounce the practice of some magistrates in issuing certificates certifying that such minor children are over the ages specified in the Child Labor Law when it must be apparent to such magistrates that said children are of such tender ages as to be within the protection of the law.

And we cannot too forcibly denounce the practice of some coal companies of exacting from the parents and guardians of minor children a release from all damages which may be caused either by death or accident to such minor children in case of negligence by such companies operating the public works, such releases being obtained under the guise of age certificates.

In witness whereof, as well the aforesaid Coroner as the Jurors aforesaid have to this inquisition put their hands and seals, on the day and year and at the place above mentioned."

The Department of Mines is of the opinion, from the facts gleaned from this inquest, that Justice James J. Powell should be prosecuted for issuing a certificate of employment age to a boy who was only a few months more than nine years of age, and that the foreman, John Wallace, should also be prosecuted for employing a boy of such doubtful age. They should have known by the size and appearance of the boy that he was not fourteen years of age. The boy's father deserves punishment for swearing falsely to his son's age, but possibly the father is punished enough by the loss of his boy.

In the report of the Department for 1906 the question of child labor in the mines was discussed, and it was stated there that after very careful investigation no violation of the law was found to exist so far as the inspectors, superintendents and mine foremen were concerned. This statement was based upon the reports of the Inspectors, who positively asserted that no children under legal age were employed in or about the mines. The opinion of the Department, however, was that while the Inspectors and superintendents asserted what they believed to be the truth, it was nevertheless possible that in certain cases the parents or guardians might have made false statements regarding the ages of the boys.

The Department is already on record as disapproving the provision of the present law regarding the issuance of age certificates by justices of the peace and aldermen, and holds to the opinion that the power to issue certificates should be taken from those who now exercise that right and be vested in the Inspectors, who could be held to a strict accountability in the matter. As long as the present law continues in force it may be expected that fraudulent certificates will be issued and that they will be accepted by the mine foremen.

The Chief of the Department of Mines will, however, prosecute any violations of the Child Labor Law, upon receiving proper information from responsible parties who can furnish proof to sustain their charges.

TRADING IN MINERS' CERTIFICATES

A most reprehensible practice is prevalent in the Anthracite region of Pennsylvania. It is the illegal trading in miners' certificates. Under the law any person who desires to be employed in the Anthracite mines as a miner must first obtain a certificate showing that he has had at least two years' practical experience as a miner or as a mine laborer in the mines of this Commonwealth. This certificate is supposed to be granted only after the applicant has answered intelligently and correctly at least twelve questions in the English language pertaining to the requirements of a practical miner. The law requiring a certain standard of proficiency from the miners was passed chiefly with a view to protect the persons employed in the mines, and it is to be greatly deplored that a provision so wise should not only be ignored but violated. It is claimed, and no doubt it is true in some cases, that these certificates are purchased by persons who are utterly incompetent to act as miners. A man from Pottsville, giving his name and address, has written the Department as follows: "When in need of a certificate, all you have to do is to send a man to Mr. ———, of ———, Schuylkill county, with the price, and it will be given without a question asked." It is said that some of these unscrupulous men in some of the Anthracite districts are making a nice income by the traffic in miners' certificates.

This is a serious matter, as it permits men to mine coal who are ignorant of the requirements of the work and who are therefore a constant menace to the safety of those about them. It is difficult to say just how this practice can be terminated, but as the miners themselves are aware of the great hazard that attends their occupation even under the most favorable circumstances, they should take prompt action to stop the placing of incompetent men in the mines. The fraudulent issuance of certificates can be stopped if the miners make an urgent demand for a thorough investigation of the matter. Something is radically wrong, and drastic measures should be taken, if necessary, to effect a remedy of a condition that is not only a menace to life, but a disgrace to the Anthracite mining profession.

It may be said that the law creating the Miners' Examining Board does not nullify Rule 35 of Article 12, which reads: "No person shall be employed to blast coal or rock unless the mine foreman is satisfied that such person is qualified by experience and judgment to perform the work with ordinary safety."

From the rule as quoted it can be seen that the mine foremen are not justified in hiring ignorant men to mine coal or rock in Anthracite mines, even when they possess certificates of qualification from the Miners' Examining Board.

There ought to be but one Board of Examiners for each inspection district with the Inspector as an ex-officio member. The members, excepting the Inspector, should be paid $5 a day for their services and the fees received from applicants should be forwarded to the Department of Mines and the certificates should be issued by that Department. If the boards were paid by the State instead of by fees, the inducement or temptation to traffic in certificates would be done away with.

COAL PRODUCTION IN PENNSYLVANIA

The table herewith shows the actual number of days worked in each district during 1907 and the average daily production; also the total average production per day for the region, 324,401 tons. Assuming that the mines had worked 280 days last year, the total Anthracite production would have been 90,832,280 tons, and if it had been possible to work 300 days, the production would have been 97,320,300 tons. The table also shows the production of each district on the same basis. In arriving at the average number of tons produced per day, the total number of days was divided into the total production of each mine in each district.

Districts	Number of days worked (in breakers)	Production in tons per day*	Estimated annual production of 280 days*
First,	205	17,627	4,935,560
Second,	208	21,127	5,915,560
Third,	202	21,050	5,894,000
Fourth,	219	20,142	5,639,760
Fifth,	181	19,034	5,329,520
Sixth,	193	17,885	5,007,800
Seventh,	202	18,891	5,289,480
Eighth,	220	18,282	5,118,960
Ninth,	203	22,793	6,382,040
Tenth,	221	19,322	5,410,160
Eleventh,	222	21,587	6,044,360
Twelfth,	263	13,494	3,778,320
Thirteenth,	266	12,887	3,608,360
Fourteenth,	254	10,506	2,941,680
Fifteenth,	249	12,975	3,633,000
Sixteenth,	226	11,844	3,316,320
Seventeenth,	251	15,675	4,389,000
Eighteenth,	236	11,266	3,154,480
Nineteenth,	247	10,854	3,039,120
Twentieth,	273	7,160	2,004,800
Totals,	....	324,401	90,832,280

*Production from washeries not included.

Increase in Production and Number of Employes between 1885 and 1907

Years	Production in tons	Inside employes	Outside employes
1885,	34,135,583	62,901	37,419
1890,	40,166,327	73,613	46,306
1895,	50,847,104	89,251	54,454
1900,	51,217,318	94,140	49,684
1905,	70,220,554	116,371	51,883
1906,	64,410,277	114,998	51,177
1907,	76,836,082	117,849	50,925

Percentage of increase in production, 1885 to 1907—125.09 per centum.

Percentage of increase in employes inside, 1885 to 1907—87.36 per centum.

Percentage of increase in employes outside, 1885 to 1907—36.09 per centum.

Table showing number of mines, number of employes inside and outside, and production by districts—Anthracite and Bituminous—1907

Districts	Anthracite				Districts	Bituminous			
	Number of mines	Number of employes inside	Number of employes outside	Production (gross tons)		Number of mines	Number of employes inside	Number of employes outside	Production (net tons)
First,	52	6,498	2,202	3,965,926	First,	47	7,658	1,235	8,197,675
Second,	34	7,900	2,486	4,540,888	Second,	58	6,462	2,791	7,825,659
Third,	28	7,894	2,280	4,858,727	Third,	97	5,651	784	4,196,921
Fourth,	29	7,537	2,513	5,636,770	Fourth,	81	7,666	1,447	6,784,617
Fifth,	44	6,482	2,413	3,571,157	Fifth,	60	6,222	3,892	9,213,255
Sixth,	33	6,297	2,563	3,748,691	Sixth,	80	9,113	1,226	7,489,111
Seventh,	42	6,190	2,406	4,415,875	Seventh,	65	8,869	1,006	8,045,186
Eighth.	27	6,692	2,357	4,145,321	Eighth,	122	6,955	746	5,198,068
Ninth,	25	6,991	2,326	4,744,505	Ninth,	51	5,607	3,418	7,942,340
Tenth,	39	6,978	2,500	4,333,894	Tenth,	97	8,888	1,180	6,588,829
Eleventh,	64	6,953	4,036	4,792,295	Eleventh,	64	5,558	4,088	9,279,222
Twelfth,	14	4,984	2,494	3,548,990	Twelfth.	73	10,196	1,731	9,245,360
Thirteenth,	22	5,100	3,274	3,706,747	Thirteenth,	46	7,300	1,005	7,193,063
Fourteenth,	26	3,514	2,361	2,712,605	Fourteenth,	72	7,249	838	7,304,894
Fifteenth,	28	5,817	2,502	3,230,879	Fifteenth,	116	9,023	992	7,499,577
Sixteenth,	38	4,836	2,554	2,720,364	Sixteenth,	59	7,239	2,617	9,124,433
Seventeenth,	19	4,677	2,533	3,934,512	Seventeenth,	58	8,339	954	7,836,135
Eighteenth,	37	4,313	2,541	2,673,772	Eighteenth,	140	6,228	693	4,231,139
Nineteenth,	35	4,245	2,798	3,052,077	Nineteenth,	36	9,340	1,209	10,201,729
Twentieth,	22	3,951	1,786	2,502,087	Twentieth,	99	6,808	898	6,161,834
Totals,	*658	117,849	50,925	76,836,082	Totals,	†1,521	150,371	32,750	149,559,047

*643 in operation.
†1,387 in operation.

ACCIDENTS

A great deal has been said in the public press during the past few years regarding the increase in the accidents in and about the coal mines of Pennsylvania and the opinion seems to prevail that the increase in accidents is greater in proportion than the increase in production. This opinion may be justified as far as the Bituminous region is concerned, but the facts as they appear in connection with the Anthracite mines disprove it entirely. To give some light upon the subject the Department has gone to the trouble to tabulate the accidents that have occurred during the past 38 years, namely, from 1870 to 1907 inclusive. It will be seen that during the years 1870 to 1874 inclusive, immediately after the passage of the Anthracite Mine Law, there were 67,280 tons of coal produced for each life lost. From 1875 to 1879 inclusive, 98,635 tons; 1880 to 1884 inclusive, 109,099 tons; 1885 to 1889 inclusive, 111,831 tons; 1890 to 1894 inclusive, 104,972 tons; 1895 to 1899 inclusive, 111,889 tons; 1900 to 1904 inclusive, 120,908 tons; 1905 to 1907 inclusive, 111,067 tons. With the exception of the periods from 1890 to 1894 and 1905 to 1907 inclusive, there has been a constant decrease in the loss of life when the number of employes is compared with the production, and even the latter two periods showed a marked decrease.

The loss of life per one thousand employes for the periods named was as follows; 1870 to 1874 inclusive, 5.26; 1875 to 1879 inclusive, 3.25; 1880 to 1884 inclusive, 3.34; 1885 to 1889 inclusive, 3.06; 1890 to 1894 inclusive, 3.26; 1895 to 1899 inclusive, 3.05; 1900 to 1904 inclusive, 3.09; 1905 to 1907 inclusive, 3.79. During the last three years the average loss of life has been somewhat greater than formerly, but during the period of thirty-eight years, the time covered by the Anthracite Mine Law, the average loss per one thousand employes has been 3.41 lives.

During the same period we find that for every one million tons of coal produced the loss of life was as follows: 1870 to 1874 inclusive, 14.79 persons; 1875 to 1879 inclusive, 10.08 persons; 1880 to 1884 inclusive, 9.29 persons; 1885 to 1889 inclusive, 9.03 persons; 1890 to 1894 inclusive, 9.53 persons; 1895 to 1899 inclusive, 9 persons; 1900 to 1904 inclusive, 8.32 persons; 1905 to 1907 inclusive, 9.05 persons. The general average for the period of thirty-eight years was 9.29 lives lost for every one million tons produced. The accidents by falls during that time were 49.79 per centum of the fatal accidents inside of the mines and the accidents by cars were 15.18 per centum. If we take the total number of accidents inside and outside the percentage by falls is 42.73 and by cars 13.03. Many of the accidents enumerated are charged to the carelessness or ignorance of the victims, but some of the more recent serious accidents by explosions of gas, in my opinion, have resulted from the carelessness of the persons directly in charge of the mines. I make this statement notwithstanding the fact that the juries in these cases have cleared the management of all blame.

Persons who are acquainted with the conditions existing in the Anthracite mines of Pennsylvania are aware of the fact that the dangers connected with the occupation of mining have greatly increased within recent years on account of the mines getting deeper and more difficult to operate. In addition to this the workmen as a class are deteriorating year by year, notwithstanding the fact that Miners' Examining Boards were established some years ago for the purpose of preventing incompetent persons from obtaining employment in the mines. It was supposed that these boards would issue certificates only to such persons as were qualified to perform the work of miners. It is a fact, however, that from 60 to 70 per centum of the employes inside of the mines cannot understand or speak the English language.

The attention of the managers, superintendents and foremen of the companies named in the table herewith is called to the loss of life among the employes. The table shows the total production of coal, the production per fatal accident, the number of inside employes and the number of fatal accidents per one thousand employed inside, for the years 1902 to 1907 inclusive. Figures relating to inside employes are used so that a comparison may be made with a similar table in the Bituminous Report.

The figures for each company are given and in many cases they are a sad commentary on the carefulness and efficiency of the persons in immediate charge of the mines. The companies that produced 1,000,000 tons or more in 1907 show a loss of life per 1,000 employed of from 3.86 to 8.42. The companies that produced between 500,000 tons and 1,000,000 tons show a loss of life of from 3.15 to 6.04. Only two of the latter companies show less than four lives lost per 1,000 employed. The smaller companies show an average loss of 4.3 per 1,000 employed, and while this is entirely too high a percentage, it is much less than the percentage shown by the larger companies.

The increase in the number of inspectors from eight to twenty has not brought about a decrease in the number of accidents. While the mines are now inspected more than twice as often as in former years, the fatalities continue at even a greater percentage than before. In order to lessen the number of accidents we must not look to the inspectors, but to the management of the mines and the employes. Upon them depends largely the question of safety.

Table showing tons of coal produced per fatal accident inside of mines, and number of persons killed per each 1,000 employes, 1902-1907

Years	Names of Companies	Production in tons of 2,000 pounds	Fatal accidents inside of mines	Production per fatal accident inside	Number of employes inside	Number killed per 1,000 employed
1902	Philadelphia and Reading Coal and Iron Company,	6,210,055	45	138,001	16,933	2.66
1903		11,257,488	67	168,022	14,676	4.56
1904		11,381,911	69	164,955	16,056	4.30
1905		12,856,674	89	144,457	20,024	4.44
1906		11,452,702	66	173,526	18,810	3.51
1907		13,781,161	87	158,404	19,063	4.56
	Totals and averages,	66,939,996	423	158,251	105,562	4.01
1902	Delaware, Lackawanna and Western Railroad Company,	4,939,028	18	274,390	9,555	1.88
1903		8,639,560	40	215,989	10,772	3.71
1904		8,766,895	43	203,881	10,475	4.10
1905		5,562,534	53	104,953	12,303	4.31
1906		9,094,114	53	171,587	12,821	4.13
1907		10,359,661	73	141,913	13,394	5.45
	Totals and averages,	47,361,792	280	169,149	69,320	4.04
1902	Delaware and Hudson Company,	3,632,776	13	297,444	9,002	1.44
1903		6,965,458	39	178,601	10,386	3.75
1904		6,165,009	21	293,571	11,452	1.83
1905		6,644.527	54	123,046	11,006	4.90
1906		6,205,875	22	282,085	10,387	2.10
1907		7,465,416	46	162,292	10,661	4.31
	Totals and averages,	37,079,061	195	190,149	62,894	3.10
1902	Lehigh Valley Coal Company,	2,828,838	16	176,802	6,144	2.60
1903		6,482.112	47	137,917	8,333	5.64
1904		6,294,291	65	96,835	9,349	6.95
1905		7,687,356	54	142,358	9,991	5.40
1906		6,059,876	54	112,219	9,334	5.78
1907		7,479,197	43	173,935	9,258	4.64
	Totals and averages,	36,831,670	279	132,013	52,409	5.32
1902	Lehigh and Wilkes-Barre Coal Company,	2,281,951	13	175,534	5,729	2.27
1903		4,467,281	24	186,136	5,450	4.42
1904		4,311,768	32	134,742	5,623	5.69
1905		4,679,009	27	173,296	6,161	4.38
1906		4,277,585	29	147,503	6,257	4.63
1907		4,985,157	56	89,021	6,650	8.42
	Totals and averages,	25,002,751	181	138,137	35,870	5.05
1902	Pennsylvania Coal Company,	1,542,286	5	308,457	5,125	.97
1903		3,572,199	28	127,578	5,715	4.90
1904		3,412,544	26	131,251	6,563	3.96
1905		3,770,483	26	145,018	7,260	3.58
1906		3,607,912	28	128,854	7,021	3.98
1907		4,756,263	34	139,890	7,154	4.75
	Totals and averages,	20,661,687	147	140,556	38,838	3.78
1902	Susquehanna Coal Company,	1,825,433	9	202,826	5,243	1.72
1903		2,619,852	15	174,657	5,892	2.54
1904		2,784,929	15	185,662	5,050	2.97
1905		2,843,807	15	189,587	5,192	2.89
1906		3,042,423	29	104,911	5,074	5.71
1907		3,509,790	22	159,536	5,464	4.03
	Totals and averages,	16,626,234	105	158,345	31,915	3.29

Table showing tons of coal produced per fatal accident inside of mines, and number of persons killed per each 1,000 employes, 1902-1907—Continued

Years	Names of Companies	Production in tons of 2,000 pounds	Fatal accidents inside of mines	Production per fatal accident inside	Number of employes inside	Number killed per 1,000 employed
1902	Lehigh Coal and Navigation Company,	1,146,401	4	286,600	2,166	1.84
1903		2,267,392	11	206,126	2,471	4.45
1904		2,358,561	9	262,062	2,908	3.09
1905		2,770,788	13	213,137	3,167	4.10
1906		2,780,962	8	347,620	3,848	2.07
1907		3,559,378	16	222,461	3,930	4.07
	Totals and averages,	14,883,482	61	243,992	18,490	3.30
1902	Scranton Coal Company,	1,651,686	6	275,281	3,778	1.59
1903		1,573,896	12	131,158	3,946	3.04
1904		2,691,577	15	179,438	4,455	3.37
1905		2,726,118	16	170,382	4,639	3.45
1906		2,336,193	16	146,012	4,573	3.50
1907		2,895,922	40	72,398	4,793	8.35
	Totals and averages,	13,875,392	105	132,147	26,184	4.01
1902	Hillside Coal and Iron Company,	703,775	2	355,887	1,649	1.21
1903		1,896,337	14	135,452	2,674	5.23
1904		1,554,357	14	111,025	2,850	4.91
1905		1,755,441	12	146,287	2,701	4.44
1906		1,591,256	12	132,604	2,904	4.13
1907		1,777,217	21	84,629	2,808	7.48
	Totals and averages,	9,278,383	75	123,712	15,586	4.81
1902	Coxe Brothers and Company, Incorporated,	681,145	5	116,229	1,191	4.20
1903		1,465,432	7	209,919	1,508	4.64
1904		1,392,952	9	198,993	1,605	5.61
1905		1,472,278	8	184,035	1,296	6.17
1906		1,359,883	1	1,359,883	1,426	.70
1907		1,561,577	7	223,082	1,521	4.60
	Totals and averages,	7,933,267	37	214,413	8,547	4.33
1902	Kingston Coal Company,	710,456	9	78,940	1,471	6.12
1903		1,201,070	7	171,581	1,499	4.62
1904		1,289,398	5	257,880	1,658	3.02
1905		1,326,893	6	221,150	1,808	3.32
1906		1,339,353	8	167,419	1,775	4.51
1907		1,706,643	8	213,330	2,073	3.86
	Totals and averages,	7,573,813	43	176,135	10,284	4.18
1902	Temple Iron Company,	970,528	9	107,836	2,413	3.73
1903		1,311,008	15	87,400	2,380	6.30
1904		1,339,722	15	89,315	2,447	6.13
1905		1,391,530	16	86,971	2,550	6.27
1906		822,563	5	164,513	1,919	2.60
1907		1,294,838	19	68,149	2,275	8.35
	Totals and averages,	7,130,189	79	90,256	13,984	5.65
1902	G. B. Markle and Company,	533,349	3	177,783	1,705	1.76
1903		1,222,494	4	305,624	1,511	2.65
1904		1,207,416	5	241,483	1,474	3.39
1905		1,203,885	5	240,777	1,399	3.57
1906		958,274	7	136,896	1,147	6.10
1907		1,099,741	6	183,290	1,226	4.89
	Totals and averages,	6,225,159	30	207,505	8,462	3.55

Table showing tons of coal produced per fatal accident inside of mines, and number of persons killed per each 1,000 employes, 1902-1907—Continued

Years	Names of Companies	Production in tons of 2,000 pounds	Fatal accidents inside of mines	Production per fatal accident inside	Number of employes inside	Number killed per 1,000 employed
1902	Parrish Coal Company,	413,882	1	413,882	1,123	.89
1903		905,823	3	301,941	1,222	2.45
1904		775,259	6	129,209	1,290	4.65
1905		770,161	5	154,032	1,244	4.02
1906		579,381	13	44,568	956	13.60
1907		623,830	6	103,972	1,033	5.81
	Totals and averages,	4,068,336	34	119,657	6,868	4.94
1902	Mineral Railroad and Mining Company,	479,207	14	34,229	1,592	8.79
1903		830,075	4	207,519	1,797	2.23
1904		649,785	1	649,785	1,719	.58
1905		653,978	11	59,453	1,489	7.39
1906		645,108	5	129,022	1,349	3.71
1907		694,145	6	115,691	1,231	4.87
	Totals and averages,	3,952,298	41	96,398	9,177	4.47
1902	St. Clair Coal Company,	354,597	2	177,299	259	7.72
1903		526,163	1	526,163	344	2.91
1904		477,570	1	477,570	419	2.39
1905		564,928	4	141,232	490	8.16
1906		565,983	2	282,992	502	3.98
1907		693,066	3	231,022	497	6.04
	Totals and averages,	3,182,307	13	244,793	2,511	5.18
1902	Price-Pancoast Coal Company,	392,507	2	196,254	655	3.05
1903		550,701	1	550,701	707	1.41
1904		240,504	1	240,504	717	1.39
1905		608,945	6	101,491	1,070	5.61
1906		674,422	5	134,884	1,069	4.68
1907		741,616	5	148,323	1,093	4.57
	Totals and averages,	3,208,695	20	160,435	5,311	3.77
1902	Mill Creek Coal Company,	310,170	1	310,170	473	2.11
1903		530,455	1	530,455	529	1.89
1904		519,729	4	129,932	624	6.41
1905		572,334	7	81,762	624	11.22
1906		486,832	7	69,547	615	11.38
1907		618,302	2	309,151	635	3.15
	Totals and averages,	3,037,822	22	138,083	3,500	6.29
1902	A. Pardee and Company,	195,492	2	97,746	726	2.75
1903		536,643	2	268,322	756	2.65
1904		559,567	5	111,913	807	6.20
1905		573,427	5	114,685	819	6.11
1906		522,826	4	130,707	882	4.54
1907		614,934	5	122,987	947	5.28
	Totals and averages,	3,002,889	23	130,560	4,937	4.66
1902	Pardee Brothers and Company,	221,359	2	110,680	331	6.04
1903		380,895	2	190,448	384	5.21
1904		503,835	5	100,767	551	9.07
1905		569,095	2	284,548	700	2.85
1906		545,750	1	545,750	707	1.41
1907		609,253	3	203,084	781	3.84
	Totals and averages,	2,830,187	15	188,679	3,454	4.34
1907	West End Coal Co.,	765,722	5	153,144	931	5.37
1907	Hudson Coal Co.,	714,424	6	119,071	1,335	4.49
1907	Sterrick Creek Coal Co.,	663,935	3	221,312	716	4.19
1907	Miscellaneous companies,	13,085,224	79	165,636	18,380	4.30

Nationality of Employes Killed by Falls in the Anthracite Region, 1907

Nationality of Employes	Districts																					
	First	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth	Ninth	Tenth	Eleventh	Twelfth	Thirteenth	Fourteenth	Fifteenth	Sixteenth	Seventeenth	Eighteenth	Nineteenth	Twentieth	Total	Percentage
American,	4	2	1	......	1	1	2	......	1	......	3	1	......	......	4	1	2	......	5	5	33	24.00
English,	......	1	1	......	......	2	3	......	1	1	......	......	......	......	......	......	......	......	......	......	9	
Welsh,	......	2	1	1	......	......	......	1	1	......	......	1	......	......	......	......	......	......	......	......	7	
Scotch,	1	......	1	......	1	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	3	
Irish,	2	1	3	2	1	4	......	......	1	......	......	1	......	......	......	......	......	......	......	......	15	
German,	......	......	......	1	......	2	......	1	2	......	......	1	1	1	1	......	......	......	......	......	10	
Polish,	8	4	9	11	5	5	9	10	7	9	1	6	2	1	6	6	......	4	1	......	104	76.00
Hungarian,	......	......	2	......	......	......	1	......	......	......	5	......	......	......	......	......	1	1	......	......	10	
Italian,	2	3	......	6	5	2	......	......	......	1	1	1	......	......	......	......	......	......	......	......	21	
Slavonian,	......	2	1	......	......	1	1	......	1	......	......	......	......	......	......	......	1	......	......	......	7	
Lithuanian,	3	2	2	......	......	......	2	2	3	2	1	5	1	1	1	1	......	1	4	1	32	
Austrian,	2	......	......	......	1	1	......	2	1	......	......	......	......	......	......	1	......	......	......	......	8	
Russian,	6	1	1	1	......	......	1	2	......	......	......	......	......	1	......	1	......	......	1	1	16	
Tyrolean,	......	......	......	......	......	......	......	......	......	......	......	......	......	......	1	......	......	......	1	......	2	
Greek,	......	......	......	......	......	......	......	......	......	......	......	......	1	......	......	......	......	......	......	......	1	
Montenegrian,	......	......	......	......	......	......	......	......	......	......	1	......	......	......	......	......	......	......	......	......	1	
Totals,	28	18	22	22	14	18	19	18	18	13	12	16	5	4	13	10	4	6	12	7	279	100.00

COMPARISON BETWEEN PENNSYLVANIA AND FOREIGN COUNTRIES

A great deal has been said recently about the accidents that occur in the coal mines of this country, particularly in Pennsylvania, and the opinion seems to prevail generally that accidents in this country are increasing, while in European countries they are decreasing.

To reach a fair conclusion in the matter it is necessary to compare existing conditions in the different countries and mining territories, the number of days worked and the number of tons of coal produced per employe. An effort has been made to do this in this article. It is conceded that the year 1907 was a very disastrous one in the mines of Pennsylvania, the worst in fact in the history of the trade; but every mining country has years that are marked by casualties of unusual magnitude. Even France, with all her modern improvements and careful supervision, in 1905 attained an unenviable notoriety on account of the greatest mining disaster on record—the explosion at the Courrieres mine by which over 1,100 lives were lost.

Probably more stringent laws could be enacted, but it is difficult to enact a law that will compel superintendents, foremen and other employes to perform thoroughly and unremittingly the duties devolving upon them; and to enact a law that will keep ignorant men from being employed in dangerous mines is a still harder problem. When it is considered that between 60 and 70 per centum of the inside employes in the Pennsylvania mines are unable to speak or understand the English language, it is no wonder that there is a great loss of life. No person whatever should be employed inside of a dangerous mine until he has acquired a sufficient knowledge of English to understand the rules and regulations as furnished by the State.

While it is true that the statistics for recent years show an increase in accidents in Pennsylvania, it is nevertheless a fact that they have increased very slightly in proportion to the increase in the production of coal and in the number of employes.

The table herewith makes a comparison between Pennsylvania, Great Britain, Germany, France, Belgium and Austria. The figures are the latest ones available. The short ton of 2,000 pounds is used in this table.

	Production (Net tons)	Employes	Tons produced per employe	Lives lost	Lives lost per 1,000 employes	Lives lost per 1,000,000 tons	Days worked
Pennsylvania Anthracite, 1903, ...	75,232,585	151,827	495	518	3.41	6.88	211
Great Britain Bituminous, 1903, ...	257,974,605	822,000	314	1,072	1.30	4.15	264
Germany Bituminous, 1903, ...	128,569,808	470,305	273	826	1,75	6.35	274
France Bituminous, 1900, ...	34,123,901	158,580	215	224	1.41	6.56	296
Belgium Bituminous, 1902, ...	25,217,835	134,889	187	144	1.06	5.71	289
Austria Bituminous, 1903, ...	13,964,931	66,663	209	114	1.71	8.16	289

While it is not customary to make a comparison of Anthracite and Bituminous statistics, we have done so in this case. The table shows that the employe of the anthracite mines in 1903 produced an average of 495 tons, working an average of 211 days. If he had worked the same average number of days as the foreign employe, he would have produced over 600 tons. Only about two-thirds of the Anthracite workers are producers of coal, the other third being outside employes. The figures in the table show that if the Anthracite inside employe had worked the same average number of days as the foreign employe he would have produced about 915 tons.

ACCIDENTS BY COUNTIES AND DISTRICTS, 1907

The table herewith shows by counties and districts the chief causes of fatal accidents in the Anthracite mines during the year. The most prolific causes were falls, cars, explosions of gas and dust, and electricity, in the order named

Districts	Names of Counties or Parts of Counties in Each District	Accidents by falls	Percentage of accidents inside by falls	Accidents by explosions of gas and dust	Percentage of accidents inside by explosions of gas and dust	Accidents by cars inside	Percentage of accidents inside by cars	Accidents inside by electricity	Percentage of accidents inside by electricity	Miscellaneous accidents inside	Percentage of accidents inside by miscellaneous causes	Total number of accidents inside
First,	Lackawanna, Susquehanna, Wayne,	28	71.79	......	......	4	10.25	......	......	7	17.96	39
Second,	Lackawanna,	18	36.73	9	18.37	6	12.25	......	......	16	32.65	49
Third,	Lackawanna,	22	53.66	......	......	6	14.63	......	......	13	31.71	41
Fourth,	Lackawanna,	22	44.89	7	14.29	10	20.41	......	......	10	20.41	49
Fifth,	Lackawanna, Luzerne, Sullivan,	14	77.78	1	5.56	3	16.66	......	......	......	......	18
Sixth,	Luzerne,	18	45.00	5	12.50	2	5.00	......	......	15	37.50	40
Seventh,	Luzerne,	19	45.23	7	16.67	7	16.67	......	......	9	21.43	42
Eighth,	Luzerne,	18	54.55	2	6.06	3	9.09	1	3.03	9	27.27	33
Ninth,	Luzerne,	18	47.37	4	10.53	7	18.42	......	......	9	23.68	38
Tenth,	Luzerne,	13	36.10	......	......	8	22.22	1	2.78	14	38.90	36
Eleventh,	Luzerne, Carbon,	12	48.00	......	......	7	28.00	......	......	6	24.00	25
Twelfth	Schuylkill,	16	53.33	2	6.67	4	13.33	......	......	8	26.67	30
Thirteenth,	Schuylkill,	5	26.32	......	......	7	36.84	......	......	7	36.84	19
Fourteenth,	Schuylkill, Columbia,	4	36.37	......	......	1	9.09	......	......	6	54.54	11
Fifteenth,	Northumberland,	13	48.15	5	18.52	2	7.41	......	......	7	25.92	27
Sixteenth,	Northumberland,	10	55.56	......	......	2	11.11	......	......	6	33.33	18
Seventeenth,	Schuylkill, Carbon,	4	17.40	1	4.35	3	13.04	1	4.35	14	60.86	23
Eighteenth,	Schuylkill,	6	20.70	......	......	3	10.35	......	......	20	68.95	29
Nineteenth,	Schuylkill,	12	63.16	1	5.26	1	5.26	......	......	5	26.32	19
Twentieth,	Dauphin, Schuylkill,	7	46.67	......	......	2	13.33	......	......	6	40.00	15
		279	46.42	44	7.32	88	14.64	3	.50	187	31.12	601

Table showing causes of fatal accidents inside of mines; average production per accident, and percentage of employes killed, by counties, 1902-1907

Years	County	Number of mines	Number of inside employes	Production in tons	Fatal accidents by explosions of gas	Fatal accidents by falls	Total fatal accidents inside	Production in tons per fatal accident inside	Percentage killed per 1,000 employes
1902,	Luzerne,	229	26,024	12,750,296	7	36	93	137,100	3.57
1903,		223	38,370	23,926,481	15	75	169	141,577	4.40
1904,		256	43,603	23,923,279	8	106	200	119,616	4.59
1905,		254	43,101	25,187,313	14	122	215	117,150	4.99
1906,		271	41,643	23,760,886	27	84	194	122,479	4.66
1907,		243	42,022	27,547,399	19	105	223	123,531	5.30
	Totals and average,	....	234,763	137,095,654	90	528	1,094	125,316	4.66
1902,	Lackawanna,	118	25,931	8,613,772	....	23	43	200,320	1.66
1903,		114	27,745	16,480,042	3	59	107	154,019	3.86
1904,		115	30,600	15,241,462	7	62	115	132,534	3.76
1905,		126	30,853	15,997,657	2	82	127	125,966	4.12
1906,		157	31,196	16,821,929	4	70	112	150,196	3.59
1907,		155	32,444	20,029,829	16	87	174	115,114	5.36
	Totals and average,	....	178,769	93,184,691	32	383	678	137,441	3.79
1902,	Schuylkill,	76	20,876	7,041,281	3	37	60	117,355	2.87
1903,		76	20,144	13,633,624	6	44	88	154,927	4.37
1904,		106	22,272	14,052,467	8	43	107	131,331	4.80
1905,		132	25,716	15,481,627	11	60	136	113,835	5.29
1906,		153	25,365	14,621,909	7	32	94	155,552	3.70
1907,		140	25,181	18,000,866	3	48	123	146,349	4.88
	Totals and average,	....	139,554	82,831,774	38	264	608	136,236	4.36

1902,	Northumberland,	28	9,670	2,789.517	10	19	34	84,397	3.52
1903,		26	9,312	4,916,105	2	21	35	140,460	3.76
1904,		52	9,248	4,784,846	6	15	39	122,688	4.22
1905,		54	9,823	4,797,322	5	21	42	114,222	4.28
1906,		70	9,585	4,792,408	3	17	32	149,762	3.34
1907,		60	10,653	5,951,243	5	23	45	132,250	4.22
	Totals and average,	....	58,291	28,031,441	31	107	227	123,487	3.89
1902,	Carbon,	10	2,222	939,220	....	1	4	234,805	1.80
1903,		15	2,120	1,905,033	....	2	13	146,511	6.13
1904,		20	2,381	2,012,064	....	2	7	287,438	2.94
1905,		23	2,460	2,211,077	....	....	9	245,675	3.66
1906,		23	2,740	2,006,092	1	2	6	334,348	2.19
1907,		30	2,989	2,466,538	1	3	14	176,181	4.68
	Totals and average,	....	14,912	11,540,024	2	10	53	217,736	3.55
1902,	Columbia,	6	1,438	206,134	....	....	3	68,711	2.08
1903,		5	1,454	1,208,843	....	....	3	402,948	2.06
1904,		10	1,419	1,028,236	....	7	10	102,824	7.04
1905,		9	1,567	1,097,944	....	2	7	156,849	4.47
1906,		7	1,403	865,237	1	3	7	123,605	4.99
1907,		8	1,468	1,060,954	....	1	4	265,239	2.72
	Totals and average,	....	8,749	5,467,348	1	13	34	160,804	3.89
1902,	Dauphin,	2	1,120	377,983	....	....	1	377,983	.89
1903,		2	1,256	654,437	....	3	5	130,887	3.98
1904,		9	1,269	645,906	1	....	*11	58,719	8.67
1905,		10	1,350	645.648	1	1	5	129,129	3.70
1906,		10	1,422	656,003	....	3	3	218,667	2.11
1907,		12	1,393	741,054	....	2	5	148,210	3.59
	Totals and average,	....	7,810	3,721,031	2	9	30	124,034	3.84
1902,	Susquehanna,	2	1,086	404,248	....	2	2	202,124	1.84
1903,		2	1,064	714,976	....	4	6	119,163	5.64
1904,		2	1,002	618,250	....	2	6	103,042	5.99
1905,		2	1,026	607,273	....	6	6	101,212	5.85
1906,		3	1,028	501,877	....	2	6	83,646	5.83
1907,		3	970	575,079	....	9	12	47,923	12.37
	Totals and average,	....	6,176	3,421,703	....	25	38	90,045	6.15

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*Williamstown disaster.

Table showing causes of fatal accidents inside of mines; average production per accident, and percentage of employes killed, by counties, 1902-1907—Continued

Years	County	Number of mines	Number of inside employes	Production in tons	Fatal accidents by explosions of gas	Fatal accidents by falls	Total fatal accidents inside	Production in tons per fatal accident inside	Percentage killed per 1,000 employes
1902,	Sullivan,	3	523	365,194	....	3	5	73,039	9.56
1903,		3	455	262,002	....	2	2	131,001	4.40
1904,		3	443	262,772	....	1	1	262,772	2.26
1905,		4	331	277,229	....	1	2	138,614	6.04
1906,		4	414	320,203	....	1	2	160,101	4.83
1907,		4	459	386,697	....	1	1	386,697	2.18
	Totals and average,	....	2,625	1,874,097	....	9	13	144,161	4.95
1902,	Wayne,	....	....	....	....	....	....	....	....
1903,		1	125	61,513	....	....	....	....	....
1904,		1	125	68,172	....	....	....	....	....
1905,		1	136	59,829	....	....	....	....	....
1906,		3	202	63,733	....	....	....	....	....
1907,		3	270	76,423	....	....	....	....	....
	Totals and average,	....	858	329,670	....	....	....	....	....

Number of miners and miners' laborers employed in the mines; number killed and ratio of each class killed per 1,000 employed; average number of days worked by breakers; average production per day worked by breakers, 1881 to 1907, inclusive

Years	Number of miners employed	Number of miners killed	Number of miners killed per 1,000 employed	Number of miners' laborers employed	Number of miners' laborers killed	Number of miners' laborers killed per 1,000 employed	Average number of days worked by breakers	Average production per day worked by breakers, gross tons
1881,	22,809	114	4.99	16,726	70	4.19	221	138,181
1882,	22,843	135	5.91	15,229	56	3.68	218	143,584
1883,	25,319	136	5.37	16,879	67	3.97	232	145,272
1884,	27,100	132	4.87	19,606	81	4.13	192	169,590
1885,	28,305	160	5.65	20,128	86	4.27	204	167,331
1886,	25,970	131	5.04	17,068	68	3.98	196	177,437
1887,	29,558	102	3.45	17,548	57	3.25	208	180,981
1888,	34,547	169	4.89	21,952	87	3.96	218	191,002
1889,	30,504	194	6.36	19,368	79	4.08	197	197,837
1890,	28,936	146	5.05	18,620	95	5.10	210	191,268
1891,	30,552	180	5.89	19,590	119	6.07	213	208,339
1892,	30,779	180	5.84	22,110	111	5.02	202	226,428
1893,	32,881	195	5.93	22,853	108	4.73	202	233,562
1894,	33,357	218	6.54	23,942	91	3.80	175	260,035
1895,	34,553	179	5.18	24,638	115	4.67	187	271,909
1896,	37,003	204	5.51	26,530	134	5.09	170	282,790
1897,	36,932	210	5.69	27,277	99	3.63	151	310,310
1898,	36,377	176	4.84	24,060	124	5.15	151	312,220
1899,	36,421	199	5.46	23,946	114	4.75	179	301,867
1900,	36,832	184	4.99	24,613	95	3.86	176	291,007
1901,	37,804	224	5.92	26,265	122	4.64	195	307,210
1902,	36,392	114	3.13	25,443	62	2.44	*116	†318,203
1903,	36,823	204	5.49	27,533	110	4.00	211	318,350
1904,	39,848	233	5.85	31,217	145	4.64	213	308,494
1905,	42,078	308	7.32	31,967	148	4.63	208	337,599
1906,	41,801	226	5.41	29,652	133	4.48	206	312,671
1907.	43,035	309	7.18	29,984	136	4.54	227	338,485

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*Strike during the year.

†Washeries worked during the strike. The time was not computed in the average days worked.

Number of employes inside and outside of mines; number of fatal accidents; number of fatal accidents per 1,000 employes; number of tons of coal mined per fatal accident inside, 1881 to 1907, inclusive

Years	Number of employes inside of mines	Number of fatal accidents inside	Number of lives lost inside per 1,000 employed	Production of coal in tons of 2,000 pounds for each life lost inside	Number of employes outside of mines	Number of fatal accidents outside	Number of lives lost outside per 1,000 employed	Number of lives lost inside and outside per 1,000 employed
1881,	45,619	234	5.13	146,165	30,412	39	1.28	3.59
1882,	50,764	254	4.92	140,230	31,436	41	1.30	3.54
1883,	56,268	274	4.87	137,764	35,153	49	1.39	3.53
1884,	61,922	286	4.62	127,513	39,151	46	1.17	3.28
1885,	62,901	290	4.61	131,834	37,419	42	1.12	3.31
1886,	63,936	236	3.69	165,046	39,114	43	1.10	2.71
1887,	67,716	270	3.99	156,153	38,801	46	1.19	2.97
1888,	78,688	317	4.03	147,114	43,530	47	1.08	2.98
1889,	74,178	339	4.57	128,763	45,486	58	1.28	3.32
1890,	73,613	323	4.39	139,276	46,306	55	1.19	3.15
1891,	76,569	372	4.86	133,606	46,739	56	1.20	3.47
1892,	82,088	361	4.40	141,903	48,212	57	1.18	3.21
1893,	86,387	388	4.49	136,188	51,682	68	1.32	3.30
1894,	87,901	368	4.19	138,497	52,038	78	1.50	3.19
1895,	89,251	354	3.97	160,872	54,454	67	1.23	2.93
1896,	94,798	430	4.54	125,217	55,290	72	1.30	3.34
1897,	95,812	372	3.88	141,347	53,745	51	.95	2.83
1898,	91,171	360	3.95	146,674	51,249	51	.99	2.89
1899,	92,167	389	4.22	155,574	48,437	72	1.49	3.28
1900,	94,140	358	3.80	160,233	49,684	53	1.07	2.86
1901,	98,434	441	4.48	152,142	49,217	72	1.46	3.47
1902,	98,377	245	*2.49	168,739	49,762	55	1.11	2.03
1903,	102,055	426	4.17	176,602	49,772	92	1.85	3.41
1904,	110,362	496	4.49	148,376	50,968	99	1.94	3.69
1905,	116,371	551	4.73	142,735	51,883	93	1.79	3.83
1906,	114,998	456	3.97	141,250	51,177	101	1.98	3.35
1907,	117,849	601	5.10	143,189	50,925	107	2.10	4.20

*Year of the big strike, when an average of only 116 days was worked by the collieries.

Table AA.—Number of tons of coal mined, number of days worked, number of persons employed, number killed and injured, quantity of powder and dynamite used, etc.

Districts	Number of tons of coal shipped to market	Number of tons used at collieries for steam and heat	Number of tons sold to local trade and used by employes	Total production of coal in gross tons	Average number of days worked	Number of employes	Number of fatal accidents	Number of non-fatal accidents	Number of kegs of powder used	Number of pounds of dynamite used	Number of horses and mules
First,	3,607,590	312,575	45,761	3,965,926	205	8,700	44	51	131,129	287,842	762
Second,	4,091,339	402,530	47,019	4,540,888	208	10,386	51	62	169,261	370,232	893
Third,	4,311,086	404,810	142,831	4,858,727	202	10,174	45	73	209,638	191,413	1,004
Fourth,	5,323,703	151,956	161,111	5,636,770	219	10,050	57	52	196,988	196,043	972
Fifth,	3,214,901	303,823	52,433	3,571,157	181	8,895	24	69	136,757	135,293	841
Sixth,	3,359,802	353,982	34,907	3,748,691	193	8,860	50	93	144,155	347,044	1,092
Seventh,	3,765,500	419,302	231,073	4,415,875	202	8,596	46	119	115,360	641,986	1,137
Eighth,	3,648,099	388,236	108,986	4,145,321	220	9,049	37	137	126,326	863,466	1,090
Ninth,	4,324,284	358,457	61,764	4,744,505	203	9,317	41	76	120,507	221,900	1,124
Tenth,	3,894,871	386,371	52,652	4,333,894	221	9,478	45	83	117,340	406,866	897
Eleventh,	4,069,846	605,504	116,945	4,792,295	222	10,989	34	106	66,586	1,319,038	1,271
Twelfth,	3,165,964	337,059	45,967	3,548,990	263	7,478	33	36	81,018	398,269	696
Thirteenth,	3,218,453	430,446	57.848	3,706,747	266	8,374	29	49	48,250	583,556	650
Fourteenth,	2,423,504	246,296	42,805	2,712,605	254	5,875	13	45	13,174	860,768	643
Fifteenth,	2,879,579	310,214	41,086	3,230,879	249	8,319	35	16	66,512	770,220	754
Sixteenth,	2,364,974	286,538	68,852	2,720,364	226	7.390	20	70	59,345	251.437	753
Seventeenth,	3,449,963	381,277	103,272	3,934,512	251	7,210	27	44	10,173	1,127,225	707
Eighteenth,	2,288,805	356,725	28,242	2,673,772	236	6,854	36	85	39,830	538,827	651
Nineteenth,	2,509,119	505,422	37,536	3,052,077	247	7,043	23	50	30,912	682,175	629
Twentieth,	2,069,568	395,476	37,043	2,502,087	273	5,737	18	53	22,897	351,181	559
Totals 1907,	67,980,950	7,336,999	1,518,133	76,836,082	227	168,774	708	1,369	1,905,468	10,544,781	17,125
Totals 1906,	56,624,032	6,426,911	1,359,334	64,410.277	206	166,175	557	1,212	1,614,083	7,980,733	16,972
Totals 1905,	62,441,134	6,359,280	1,420,140	70,220,554	208	168,254	644	1,289	1,902,820	8,353,594	17.500
Totals 1904,	58,158,288	6,171,748	1,379,222	65,709,258	213	161,330	595	1,047	1,791,192	6,519,312	17,085
Totals 1903,	60,231,104	5,710,341	1,230,506	67,171,951	211	151,827	518	1,325	1,701,176	5,317,422	16.872
Totals 1902,	31,551,813	4,424,779	934,957	36,911,549	116	148,141	300	641	845,147	2,130,965	16,139
Totals 1901,	53,447,902	5,279,375	1,178,674	59,905,951	195	147,651	513	1,243	1,520,804	4,155,685	16,059
Totals 1900,	45,271,608	4,880,932	1,064,778	51,217,318	171	143,826	411	1,057	1,237,180	3,454,641	15,708

TABLE AA.—Continued

Districts	Number of Boilers					Locomotives			Number of steam engines of all classes	Total horse power	Number of pumps delivering water to surface	Capacity in gallons per minute	Quantity delivered to surface per minute—gallons	Number of electric dynamos	Number of air compressors
	Cylindrical	Horse power	Tubular	Horse power	Total horse power	Steam	Air	Electric							
First,	93	2,596	108	12,260	14,856	18	11	30	227	18,582	68	71,505	33,240	13	9
Second,	64	1,909	127	18,655	20,564	37	9	29	274	20,092	51	41,293	23,560	19	11
Third,	116	2,871	98	16,445	19,316	7	23	23	321	21,267	54	38,543	23,201	12	13
Fourth,	78	4,174	81	10,225	14,399	12	....	66	304	23,999	52	43,296	22,436	10	16
Fifth,	70	1,900	106	17,925	19,825	26	....	36	251	14,923	53	50,935	26,544	7	8
Sixth,	29	697	147	24,513	25,210	26	6	21	416	22,905	44	43,071	23,603	7	19
Seventh,	50	1,445	132	24,377	25,822	25	9	8	534	36,025	42	28,997	17,333	8	27
Eighth,	12	600	126	24,849	25,449	13	3	17	300	26,017	42	43,321	26,953	11	12
Ninth,	147	4,537	114	20,493	25,030	5	3	15	443	37,667	32	34,087	15,752	7	22
Tenth,	33	1,155	112	23,964	25,119	27	8	25	255	29,929	36	26,097	16,238	8	22
Eleventh,	136	4,010	266	43,285	47,295	90	12	5	515	49,601	106	113,321	57,416	9	25
Twelfth,	12	360	143	21,420	21,780	13	12	4	161	29,319	26	49,294	11,180	2	10
Thirteenth,	4	120	199	27,750	27,870	26	3	1	292	32,305	32	41,386	13,639	2	12
Fourteenth,	27	915	108	17,205	18,120	23	3	5	164	18,014	34	43,316	25,973	2	5
Fifteenth,	22	640	124	20,170	20,810	17	3	7	213	24,562	46	41,194	27,041	4	15
Sixteenth,	22	680	135	18,195	18,875	19	....	3	191	22,460	57	44,006	23,489	4	11
Seventeenth,	24	439	168	30,394	30,833	43	1	15	247	12,396	16	37,477	11,879	3	11
Eighteenth,	135	5,790	182	23,235	29,025	25	5	3	245	27,886	49	58,458	30,742	3	14
Nineteenth,	34	1,548	165	28,215	29,763	24	....	11	298	38,081	49	33,724	15,028	8	16
Twentieth,	63	2,750	181	22,200	24,950	16	....	14	215	31,542	20	18,895	9,608	9	8
Totals,	1,171	39,136	2,822	445,775	484,911	492	111	338	5,866	537,572	909	902,216	454,855	148	286

TABLE A.—Number of each class of employes in each district

	Districts																				
	First	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth	Ninth	Tenth	Eleventh	Twelfth	Thirteenth	Fourteenth	Fifteenth	Sixteenth	Seventeenth	Eighteenth	Nineteenth	Twentieth	Grand totals inside and outside
Occupations of Persons Employed Inside																					
Mine foremen,	26	28	30	24	27	31	26	21	19	16	39	12	17	17	16	16	22	19	23	13	442
Assistant mine foremen,	20	21	11	13	23	28	42	20	18	22	68	13	17	18	24	20	10	12	9	17	426
Fire bosses and assistants,	1	33	67	57	27	26	51	45	61	63	11	64	65	41	55	62	47	36	60	45	917
Miners,	2,298	2,870	2,540	2,543	2,461	2,298	2,302	2,832	2,252	2,430	3,062	1,850	1,421	1,034	2,882	2,159	1,118	1,650	1,739	1,294	43,035
Miners' laborers,	2,449	2,567	2,520	2,546	1,929	1,910	1,488	1,536	2,132	2,172	1,531	981	1,272	618	784	863	614	849	762	461	29,984
Drivers and runners,	791	970	1,156	690	815	885	765	797	779	679	553	351	373	267	413	311	355	271	322	267	11,810
Doorboys and helpers,	120	205	245	174	155	126	194	195	277	254	102	70	69	102	93	71	77	60	64	58	2,711
Pumpmen,	47	69	56	47	66	59	64	85	53	57	96	25	47	27	58	40	44	47	47	38	1,072
Company men,	433	597	687	546	691	464	630	403	1,087	608	353	675	987	537	695	541	1,393	648	600	696	13,271
All other employes,	313	540	582	897	288	470	628	758	313	677	1,138	943	832	853	797	753	997	721	619	1,062	14,181
Totals,	6,498	7,900	7,894	7,537	6,482	6,297	6,190	6,692	6,991	6,978	6,953	4,984	5,100	3,514	5,817	4,836	4,677	4,313	4,245	3,951	117,849
Occupations of Persons Employed Outside																					
Superintendents,	12	11	11	2	10	3	3	8	6	5	15	3	7	4	6	6	3	13	12	3	143
Foremen,	24	15	24	30	22	20	21	17	20	15	33	21	28	18	19	19	18	28	27	18	437
Blacksmiths and carpenters,	105	162	126	118	152	187	130	176	122	157	250	90	138	102	143	135	109	120	133	95	2,750
Engineers and firemen,	209	275	243	238	225	287	328	259	289	316	459	284	372	211	304	293	276	337	369	274	5,848
Slate pickers (boys),	358	427	483	634	645	482	384	494	532	526	498	559	700	424	610	640	277	398	380	219	9,670
Slate pickers (men),	314	388	285	144	217	291	205	188	277	119	391	242	197	202	103	109	360	285	181	34	4,532
Bookkeepers and clerks,	37	36	50	53	45	40	39	39	39	49	65	34	52	24	37	45	23	33	51	26	817
All other employes,	1,143	1,172	1,058	1,294	1,097	1,253	1,296	1,176	1,041	1,313	2,325	1,261	1,780	1,376	1,280	1,307	1,467	1,327	1,645	1,117	26,728
Totals,	2,202	2,486	2,280	2,513	2,413	2,563	2,406	2,357	2,326	2,500	4,036	2,494	3,274	2,361	2,502	2,554	2,533	2,541	2,798	1,786	50,925
Grand totals inside and outside,	8,700	10,386	10,174	10,050	8,895	8,860	8,596	9,049	9,317	9,478	10,989	7,478	8,374	5,875	8,319	7,390	7,210	6,854	7,043	5,737	168,774

TABLE B.—Causes of fatal accidents in and about the mines, and number attributable to each cause; number of wives made widows and children orphaned by reason of such accidents

	Districts																					Percentages for 1907	Percentages for 1906	Percentages for 1905	Percentages for 1904	Percentages for 1903
	First	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth	Ninth	Tenth	Eleventh	Twelfth	Thirteenth	Fourteenth	Fifteenth	Sixteenth	Seventeenth	Eighteenth	Nineteenth	Twentieth	Total					
Causes of Accidents Inside																										
Falls of coal, slate and roof,	28	18	22	22	14	18	19	18	18	13	12	16	5	4	13	10	4	6	12	7	279	46.42	46.93	53.54	47.98	49.30
Mine cars,	4	6	6	10	3	2	7	3	7	8	7	4	7	1	2	2	3	3	1	2	88	14.64	14.69	14.88	14.31	16.43
Explosions of gas and dust,	....	9	....	7	1	5	7	2	4	....	....	2	....	....	5	....	1	....	1	....	44	7.32	9.43	5.99	6.05	6.10
Explosions of powder and dynamite,	1	1	2	....	....	2	1	1	....	1	1	....	1	....	...	1	4	1	...	...	17	2.83	6.14	2.91	7.06	3.99
Premature blasts,	3	11	8	7	....	3	6	3	6	....	2	5	....	2	5	2	....	3	3	1	70	11.65	11.62	7.99	6.86	8.92
Falling into shafts, slopes, etc.,	....	2	1	1	....	3	....	3	....	2	1	2	....	1	....	2	1	4	1	1	25	4.16	4.39	7.80	5.24	7.28
Crushed at batteries,	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	1	....	....	....	2	.33	.44	.55	.61	....
Kicked by mules, etc.,	1	1	1	2	....	....	....	....	1	....	....	....	....	....	....	....	2	....	....	....	8	1.33	.66	.36	1.21	1.41
Suffocation by gas or otherwise,	....	....	....	....	....	....	1	....	....	7	....	....	1	....	1	....	....	9	....	1	20	3.33	1.53	1.81	4.03	1.41
Machinery,	...	...	...	...	...	...	...	...	...	2	....	....	....	....	....	....	....	....	....	....	2	.33	.44	....	....	....
Electricity,	....	....	....	....	....	....	....	1	....	1	....	....	....	....	....	....	1	....	....	....	3	.50	....	....	....	....
Miscellaneous,	2	1	1	....	....	7	1	2	2	2	2	1	5	2	1	1	6	3	1	3	43	7.16	3.73	4.17	6.65	5.16
Totals,	39	49	41	49	18	40	42	33	38	36	25	30	19	11	27	18	23	29	19	15	601	100.00	100.00	100.00	100.00	100.00
Causes of Accidents Outside																										
Cars,	1	1	....	2	5	3	2	3	2	6	5	1	3	....	4	1	3	4	2	....	48	44.86	35.65	24.73	43.44	42.39
Machinery,	3	1	3	3	....	2	1	....	1	....	3	2	4	....	3	....	1	1	1	....	29	27.10	22.77	35.48	15.15	27.18
Suffocation in chutes, etc.,	....	....	....	....	....	1	....	....	....	....	....	....	....	1	....	....	....	....	....	1	3	2.80	8.91	11.83	8.08	4.35
Boiler explosions,	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	.94	.99	1.08	2.02	2.17
Electricity,	...	....	....	....	....	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2	1.87	....	....	....	....
Miscellaneous,	1	....	1	2	1	2	1	1	....	3	1	....	3	1	1	1	....	2	1	2	24	22.43	31.68	26.88	31.31	23.91
Totals,	5	2	4	8	6	10	4	4	3	9	9	3	10	2	8	2	4	7	4	3	107	100.00	100.00	100.00	100.00	100.00
Grand totals inside and outside,	44	51	45	57	24	50	46	37	41	45	34	33	29	13	35	20	27	36	23	18	708	....	....	....	....	....

Number of widows, 406.
Number of orphans, 949.

TABLE C.—Causes of non-fatal accidents in and about the mines, and number attributable to each cause

	Districts																				Totals	Percentages
	First	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth	Ninth	Tenth	Eleventh	Twelfth	Thirteenth	Fourteenth	Fifteenth	Sixteenth	Seventeenth	Eighteenth	Nineteenth	Twentieth		
Causes of Accidents Inside																						
Falls of coal, slate and roof, ...	23	16	19	16	24	26	26	40	20	21	30	12	10	5	5	24	3	20	8	9	357	31.07
Mine cars, ...	7	16	27	8	13	23	34	27	12	20	21	6	5	10	6	8	8	14	4	12	281	24.46
Explosions of gas and dust, ...	......	5	6	4	3	15	13	21	22	7	11	6	9	5	......	10	15	18	15	6	191	16.62
Explosions of powder and dynamite,	3	1	2	2	5	1	4	3	......	......	2	......	3	3	......	4	2	3	5	3	46	4.00
Premature blasts, ...	5	6	7	8	3	9	12	14	4	5	11	3	3	1	......	3	3	5	1	1	104	9.05
Falling into shafts, slopes, etc., ...	......	......	......	......	......	......	......	......	......	......	1	......	1	2	......	1	....	1	...	5	11	.96
Crushed at batteries, ...	......	......	......	......	......	......	......	......	......	......	......	......	......	2	......	......	....	....	...	....	2	.17
Kicked by mules, etc., ...	3	2	2	3	......	1	3	3	......	1	1	1	......	3	......	......	....	1	...	1	25	2.18
Machinery, ...	......	......	......	5	......	2	......	1	......	......	......	......	......	......	......	2	....	....	...	....	10	.87
Electricity, ...	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	....	....	...	....	....	....
Miscellaneous, ...	3	6	3	......	3	2	9	13	14	12	7	5	3	6	4	9	4	11	4	4	122	10.62
Totals, ...	44	52	66	46	51	79	101	122	72	66	84	33	34	37	15	61	35	73	37	41	1,149	100.00
Causes of Accidents Outside																						
Cars, ...	6	7	1	2	7	5	10	6	......	8	8	......	4	2	......	3	3	4	7	5	88	40.00
Machinery, ...	......	2	1	......	3	1	3	1	......	2	6	2	6	2	1	3	1	1	2	4	41	18.64
Boiler explosions, ...	......	......	......	1	......	......	......	......	2	......	......	......	......	......	......	......	....	....	...	....	3	1.36
Electricity, ...	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	....	....	...	....	....	....
Miscellaneous, ...	1	1	5	3	8	8	5	8	2	7	8	1	5	4	......	3	5	7	4	3	88	40.00
Totals, ...	7	10	7	6	18	14	18	15	4	17	22	3	15	8	1	9	9	12	13	12	220	100.00
Grand totals inside and outside	51	62	73	52	69	93	119	137	76	83	106	36	49	45	16	70	44	85	50	53	1,369	....

TABLE D.—Number of gaseous and non-gaseous mines, number of foremen, assistants and fire bosses, production of coal from gaseous and non-gaseous mines and washeries, and percentage of production from each

Districts	Number of gaseous mines	Number of foremen and assistant foremen in gaseous mines	Number of fire bosses	Number of non-gaseous mines	Number of foremen and assistant foremen in non-gaseous mines	Production in tons from gaseous mines	Production in tons from non-gaseous mines	Production in tons from washeries	Percentage of production from gaseous mines	Percentage of production from non-gaseous mines	Percentage of production from washeries
First,	1	2	1	51	44	97,394	3,516,039	352,493	2.45	88.66	8.89
Second,	15	35	33	17	14	3,262,370	1,132,219	146,299	71.85	24.93	3.22
Third,	19	30	67	9	11	4,041,606	210,540	606,581	83.18	4.34	12.48
Fourth,	19	31	57	10	6	4,191,169	219,880	1,225,721	74.35	3.90	21.75
Fifth,	19	27	27	25	23	2,105,798	1,339,450	125,909	58.97	37.51	3.52
Sixth,	15	45	26	18	14	2,175,149	1,276,566	296,976	58.03	34.05	7.92
Seventh,	40	65	51	2	3	3,586,365	229,585	599,925	81.21	5.20	13.59
Eighth,	19	34	45	8	7	3,868,627	153,506	123,188	93.33	3.70	2.97
Ninth,	23	34	61	2	3	4,556,459	70,517	117,529	96.04	1.48	2.48
Tenth,	34	30	63	5	8	3,552,595	717,545	63,754	81.97	16.56	1.47
Eleventh,	26	49	11	34	58	2,529,854	2,262,441	....	52.79	47.21	....
Twelfth,	13	24	64	1	1	3,544,848	4,142	....	99.08	.12	....
Thirteenth,	21	31	65	1	3	3,374,636	53,292	278,819	91.04	1.44	7.52
Fourteenth,	17	30	41	4	5	2,528,418	140,219	43,968	93.21	5.17	1.62
Fifteenth,	12	25	55	12	15	1,161,672	2,069,207	....	64.04	35.96	....
Sixteenth,	22	23	62	16	13	2,229,797	446,994	43,573	81.97	16.43	1.60
Seventeenth,	14	25	47	5	7	3,428,382	437,487	68,643	87.14	11.12	1.74
Eighteenth,	23	22	36	14	9	2,554,084	104,688	15,000	95.52	3.92	.56
Nineteenth,	29	23	60	6	9	2,460,878	220,069	371,130	80.63	7.21	12.16
Twentieth,	22	30	45	....	....	1,954,658	....	547,429	78.12	....	21.88
Totals and percentages,	403	615	917	240	253	57,204,759	14,604,386	5,026,937	74.45	19.01	6.54

Table E.—Quantity of coal produced by each company that produced 500,000 or more tons and the number of persons employed

Names of Companies	Number of Inspection Districts	Production of coal in tons	Employes
Philadelphia and Reading Coal and Iron Co.,	Twelfth, Thirteenth, Fourteenth, Fifteenth, Sixteenth, Eighteenth, Nineteenth, Twentieth,	12,304,608	29,335
Delaware, Lackawanna and Western Railroad Co.,	Second, Third, Fourth, Fifth, Eighth, Ninth, Tenth,	9,249,692	17,157
Lehigh Valley Coal Co.,	Fifth, Sixth, Seventh, Eighth, Tenth, Eleventh, Twelfth, Thirteenth, Fourteenth, Fifteenth, Twentieth,	6,676,069	13,349
Delaware and Hudson Co.,	First, Second, Third, Fourth, Sixth, Seventh, Ninth,	6,661,086	14,190
Lehigh and Wilkes-Barre Coal Co.,	Seventh, Ninth, Tenth, Eighteenth,	4,451,033	8,737
Pennsylvania Coal Co.,	Second, Third, Fifth, Sixth,	4,246,663	9,485
Lehigh Coal and Navigation Co.,	Seventeenth,	3,178,016	5,859
Susquehanna Coal Co.,	Tenth, Thirteenth, Fifteenth, Sixteenth	3,168,473	8,104
Scranton Coal Co.,	First, Second, Third, Fourth,	2,576,716	6,564
Hillside Coal and Iron Co.,	First, Fifth, Sixth,	1,586,901	3,905
Kingston Coal Co.,	Eighth, Ninth,	1,523,739	2,838
Coxe Brothers and Co., Incorporated,	Eleventh, Seventeenth, Eighteenth,	1,394,265	2,477
Temple Iron Co.,	First, Eighth,	1,150,105	2,820
G. B. Markle and Co.,	Eleventh,	981,956	1,717
West End Coal Co.,	Tenth,	683,680	1,253
Price-Pancoast Coal Co.,	Third,	662,157	1,362
Hudson Coal Co.,	Fifth, Sixth,	637,879	1,854
Mineral Railroad and Mining Co.,	Sixteenth,	619,772	1,806
St. Clair Coal Co.,	Nineteenth,	618,809	833
Sterrick Creek Coal Co.,	Second,	592,799	934
Parrish Coal Co.,	Ninth,	556,991	1,403
Mill Creek Coal Co.,	Eighteenth,	552,055	1,078
A. Pardee and Co.,	Eleventh,	549,048	1,370
Pardee Brothers and Co.,	Eleventh,	543,976	1,257
Totals		65,166,488	139,687

The 24 companies named in this table out of the 187 companies in the region produced 65,166,488 tons, or 85 per cent. of the total output of 76,836,082 tons

TABLE F.—Classification of employes killed or fatally injured in and about the mines 1877 to 1907 inclusive

	Years														
	1877	1878	1879	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890	1891
Inside Employes															
Mine foremen and assistants,	1	2	2	3	....	3	2	1	....	2	1	1	4	1	....
Fire bosses and assistants,	....	4	2	....	5	5	1	1	3	2	5	2	2	5	6
Miners,	119	94	141	88	114	135	136	132	160	131	102	169	194	146	180
Miners' laborers,	32	28	37	38	70	56	67	81	86	68	57	37	79	95	119
Drivers and runners,	9	11	22	18	28	28	47	28	16	18	23	33	39	37	38
Doorboys, etc.,	4	3	6	8	17	9	18	13	6	6	10	9	10	8	7
All others,	11	21	22	31	4	14	3	30	19	9	72	16	11	31	22
Totals,	176	163	232	186	234	250	274	286	290	236	270	317	339	323	372
Outside Employes															
Foremen,	....	....	....	....	....	....	....	....	....	1	3	....	1	1	....
Blacksmiths and carpenters,	1	....	2	....	....	....	7	4	6	1	3	1	1	13	2
Engineers and firemen,	....	1	2	2	2	2	11	9	7	6	3	3	9	8	3
Slate pickers,	5	6	9	6	10	11	7	12	13	9	9	6	10	12	11
All others,	12	17	17	8	27	28	24	21	16	26	28	37	37	21	40
Totals,	18	24	30	16	39	41	49	46	42	43	46	47	58	55	56
Grand totals inside and outside,	194	187	262	202	273	291	323	332	332	279	316	364	397	378	428

TABLE F.—Continued

	Years															
	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907
Inside Employes																
Mine foremen and assistants,	3	3	1	5	3	3	5	2	....	5	2	3	3	1	2	2
Fire bosses and assistants,	4	1	....	1	4	2	4	2	5	2	3	2	1	2	6	2
Miners,	180	195	218	179	204	210	176	199	184	224	114	202	233	308	226	309
Miners' laborers,	111	108	91	115	134	99	124	114	95	122	62	110	145	148	133	136
Drivers and runners,	39	47	38	33	46	26	33	39	33	45	27	46	31	31	32	46
Doorboys, etc.,	8	12	5	7	10	4	6	18	8	6	5	12	20	14	9	18
All others,	16	22	15	14	29	28	12	15	33	37	32	51	63	47	48	88
Totals,	361	388	368	354	430	372	360	389	358	441	245	426	496	551	456	601
Outside Employes																
Foremen,	....	2	....	....	....	....	1	1	....	....	....	1	1	....	2	....
Blacksmiths and carpenters,	1	2	....	3	3	4	....	2	2	....	2	4	5	5	5	1
Engineers and firemen,	4	....	4	4	4	2	4	6	2	5	7	6	3	6	3	8
Slate pickers,	7	11	12	13	12	6	13	10	9	9	12	9	11	24	14	16
All others,	45	53	62	47	53	39	33	53	40	58	34	72	79	58	77	82
Totals,	57	68	78	67	72	51	51	72	53	72	55	92	99	93	101	107
Grand totals inside and outside,	418	456	446	421	502	423	411	461	411	513	300	518	595	644	557	708

TABLE G.—Number and causes of fatal accidents in and about the mines, 1870 to 1907 inclusive

Inside	1870	1871	1872	1873	1874	1875	1876	1877	1878	1879	1880	1881	1882	1883	1884	1885	1886	1887	1888
By falls of coal,	41	48	61	73	52	57	52	72	45	75	50	57	73	58	74	65	67	74	85
By falls of slate and roof,	19	16	38	31	41	37	40	44	32	53	44	56	53	66	61	62	61	75	89
By mine cars,	20	27	21	27	32	25	29	15	30	37	36	38	48	52	61	35	35	49	58
By explosions of gas and dust,	17	28	30	27	27	19	29	16	21	29	22	36	24	32	19	25	24	19	20
By explosions of powder and dynamite,	15	6	4	2	5	10	14	3	6	11	3	3	12	11	5	13	7	7	11
By explosions of blasts, etc.,	12	12	12	17	11	18	15	8	13	6	7	14	6	28	29	18	18	14	24
By falling into shafts,	13	3	10	11	5	12	4	1	......	3	5	5	8	14	11	11	5	9	9
By falling into slopes,	10	3	3	3	1	......	4	1	1	1	......	1	4	......	5	11	3	1	3
By falling down manways, etc.,	......	2	......	2	......	2	......	......	2	3	2	1	1	......	......	......	......	......	......
Crushed at batteries,	......	......	......	......	......	......	2	3	1	6	1	1	1	......	2	......	......	......	......
By mules,	2	2	......	3	4	......	1	2	2	......	1	3	4	......	......	......	......	......	......
By suffocation,	......	24	2	9	5	4	4	......	4	1	4	5	1	......	......	......	......	......	......
By electricity,	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
Miscellaneous causes,	35	17	17	21	29	20	19	11	6	7	11	14	15	13	19	*50	16	22	18
Totals,	184	188	198	226	212	204	213	176	163	232	186	234	250	274	286	290	236	270	317
Outside																			
By cars,	4	4	9	17	4	6	6	5	7	14	2	16	18	24	16	19	12	17	16
By machinery,	4	9	8	6	5	13	5	4	6	6	5	14	9	12	13	9	11	11	12
By suffocation,	1	2	1	1	1	2	1	2	2	1	1	......	2	......	......	......	......	......	......
By boiler explosions,	11	1	......	......	4	3	1	......	1	......	......	3	......	4	3	7	5	1	......
By electricity,	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
Miscellaneous causes,	7	6	7	14	5	10	2	7	8	9	8	6	12	9	14	7	15	17	19
Totals,	27	22	25	38	19	34	15	18	24	30	16	39	41	49	46	42	43	46	47
Grand totals inside and outside,	211	210	223	264	231	238	228	194	187	262	202	273	291	323	332	332	279	316	364

*Nanticoke disaster; 26 persons were entombed by an inrush of quicksand

TABLE G.—Continued

Inside	1889	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	Percentages
By falls of coal,	81	67	75	88	80	83	66	68	84	58	78	61	66	40	61	82	76	60	71	49.79
By falls of slate and roof,	100	70	97	104	100	104	123	*187	120	128	148	114	160	76	149	156	219	154	208	
By mine cars,	58	56	59	57	74	53	52	49	40	44	51	60	69	42	70	71	82	67	88	15.18
By explosions of gas and dust,	29	60	39	57	45	29	31	41	36	33	28	38	33	20	26	30	33	43	44	9.68
By explosions of powder and dynamite,	10	3	13	7	11	18	24	9	10	11	11	14	15	19	17	35	16	28	17	3.64
By explosions of blasts, etc.,	24	16	33	29	30	28	27	28	38	24	27	29	38	13	38	34	44	53	70	7.56
By falling into shafts,	3	17	11	6	7	13	7	13	8	7	5	13	15	6	19	14	24	11	16	4.98
By falling into slopes,	5	8	6	1	2	5	7	3	3	4	4	4	5	3	6	5	19	3	7	
By falling down manways, etc.,	......	......	1	7	4	1	4	8	5	4	7	2	4	4	6	7	......	6	2	
Crushed at batteries,	......	......	2	......	1	1	3	2	1	......	2	......	1	......	......	3	3	2	2	.33
By mules,	......	......	4	2	7	4	5	6	......	8	8	......	......	2	6	6	2	3	8	.79
By suffocation,	......	......	17	1	17	26	3	9	20	16	5	11	5	3	6	20	10	7	20	2.17
By electricity,	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	3	.03
Miscellaneous causes,	29	26	15	2	10	3	2	7	7	23	15	12	30	17	22	33	23	19	45	5.85
Totals,	339	323	372	361	388	368	354	430	372	360	389	358	441	245	426	496	551	456	601	100.00
Outside																				
By cars,	27	25	12	19	14	22	26	18	21	15	26	28	19	19	39	43	23	36	48	35.24
By machinery,	14	9	14	11	13	13	15	17	9	14	12	10	12	16	25	15	33	23	29	23.56
By suffocation,	......	......	......	5	1	4	1	4	1	5	12	4	1	3	4	8	11	9	3	4.70
By boiler explosions,	6	7	2	......	2	10	4	9	......	2	......	......	1	......	2	2	1	1	1	4.75
By electricity,	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	2	.10
Miscellaneous causes,	11	14	28	22	38	28	21	24	20	15	22	11	39	17	22	31	25	32	24	31.65
Totals,	58	55	56	57	68	78	67	72	51	51	72	53	72	55	92	99	93	101	107	100.00
Grand totals inside and outside,	397	378	428	418	456	446	421	502	423	411	461	411	513	300	518	595	644	557	708	....

*Twin shaft disaster; 58 persons entombed

TABLE H.—Nationality of employes killed or fatally injured in and about the mines, 1892 to 1907 inclusive

Nationality	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907
American,	83	73	76	78	86	63	73	90	92	135	80	128	135	139	136	125
English,	33	36	37	18	33	31	21	27	20	22	14	17	23	18	9	14
Welsh,	40	41	43	30	38	38	47	30	23	24	15	30	26	27	27	30
Scotch,	2	1	4	1	3	......	7	7	4	2	2	2	3	3	1	4
Irish,	63	75	76	73	87	77	58	67	43	58	28	50	38	38	17	45
German,	18	25	27	23	17	22	22	15	21	16	15	26	18	22	17	24
Polish,	96	120	91	113	132	107	114	152	104	139	64	125	166	175	160	205
Hungarian,	43	39	62	51	61	44	36	27	18	27	14	19	25	18	21	24
Italian,	14	19	16	18	11	12	8	13	24	25	12	33	35	37	41	63
Slavonian,	9	15	2	4	3	7	7	6	19	25	16	27	38	45	34	39
Lithuanian,	9	3	1	4	8	6	......	5	17	22	17	17	40	56	46	74
Austrian,	3	6	7	4	6	7	9	10	7	8	8	25	21	22	15	22
Russian,	3	1	2	1	7	2	12	14	4	7	12	13	23	33	25	31
Greek,	2	......	......	3	8	4	......	1	2	......	2	1	1	5	1	5
Swedish,	......	1	2	......	1	3	1	5	......	......	......	2	2	......	1	......
French,	......	1	......	......	1	......	......	......	1	2	......	......	......	......	......	......
Tyrolean,	......	......	......	......	......	......	......	1	2	1	1	2	......	5	5	2
Bohemian,	......	......	......	......	......	......	......	1	......	......	......	......	......	......	1	......
Assyrian,	......	......	......	......	......	......	......	......	......	......	......	1	......	......	......	......
Canadian,	......	......	......	......	......	......	......	......	......	......	......	1	......	1	......	......
Montenegrian,	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	1
Totals,	418	456	446	421	502	423	415	461	411	513	300	518	595	644	557	708

Table I.—Production of coal in tons of 2,000 pounds, number of tons produced per employe inside, quantity of explosives used, and the number of tons of coal produced per each pound of explosive used, 1892 to 1907, inclusive

Years	Total production of coal in tons of 2,000 pounds	Average number of tons of coal produced per employe inside	Number of pounds of black powder used	Number of pounds of dynamite used	Average number of tons of coal produced per pound of explosive used
1892,	51,226,977	624	30,981,875	1,092,190	1.59
1893,	52,841,110	611	31,723,771	1,324,142	1.60
1894,	50,966,920	588	30,755,450	1,713,235	1.57
1895,	56,948,756	638	32,766,775	1,797,494	1.65
1896,	53,843,249	568	32,117,950	1,733,970	1.59
1897,	52,581,036	549	31,804,950	2,415,650	1.54
1898,	52,802,594	579	30,670,100	3,025,015	1.57
1899,	60,518 331	656	34,317,275	3,649,417	1.59
1900,	57,363,396	609	30,929,500	3,454,641	1.67
1901,	67,094,665	682	38,020,100	4,155,685	1.59
1902,	41,340,935	*482	21,128,675	2,130,965	†1.77
1903,	75,232,585	‡737	42,529,400	5,317,422	1.57
1904,	73,594,369	667	44,779,800	6,519,312	1.43
1905,	78,647,020	676	47,570,500	8,353,594	1.41
1906,	72,139,510	627	40,352,075	7,980,733	1.41
1907,	86,056,412	730	47,636,700	10,550,191	1.48

The ton of 2,000 pounds is used so that a comparison can be made with the bituminous production per pound of powder used.

*This decrease in production per employe inside was caused by the small number of days worked on account of the strike.

†The increase in production per pound of powder used was caused by the production of the washeries during the strike.

‡The increase in production per employe was due to the large production of the washeries.

Table J.—Number of employes in and about the mines, by counties, 1885 to 1907 inclusive

Counties	1885	1886	1887	1888	1889	1890	1891	1892	1893	1894	1895	1896
Carbon,	2,627	3,255	3,076	4,563	3,487	3,409	3,312	3,848	4,410	5,391	4,352	4,333
Columbia,	1,826	2,036	1,944	2,087	1,886	2,505	2,797	2,435	2,663	2,624	2,627	2,781
Dauphin,	2,505	2,156	2,212	2,136	2,276	2,203	2,135	2,104	2,094	2,092	1,975	1,988
Lackawanna,	19,663	19,872	22,485	24,421	25,176	25,262	25,406	27,555	29,080	30,475	31,446	32,771
Luzerne,	40,600	41,499	42,719	41,641	45,221	43,314	45,830	48,369	51,395	53,097	55,885	56,955
Northumberland,	8,511	8,495	9,320	10,814	12,288	12,124	12,516	12,835	13,468	13,517	13,889	14,445
Schuylkill,	24,136	25,214	24,132	25,692	28,596	30,221	30,243	31,894	33,607	31,731	32,124	35,295
Sullivan,	236	227	249	273	256	237	229	261	307	....	312	334
Susquehanna,	216	290	380	591	478	644	882	999	1,045	1,012	1,095	1,186
Wayne,	....	....	....	....	....	....	18	....	....	....	....	....
Totals,	100,320	103,044	106,517	112,218	119,664	119,919	123,308	130,300	138,069	139,939	143,705	150,088

Counties	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907
Carbon,	4,748	3,983	3,993	4,242	4,365	3,805	4,051	4,467	4,240	4,469	4,782
Columbia,	1,977	2,436	2,302	2,033	2,329	2,339	2,236	2,192	2,368	2,246	2,295
Dauphin,	2,072	2,174	2,390	2,577	2,353	1,945	2,140	2,113	2,167	2,233	2,124
Lackawanna,	33,892	32,422	30,886	32,811	34,798	35,333	37,470	40,675	40,859	41,429	42,742
Luzerne.	55,138	51,820	50,803	52,015	53,280	52,766	55,639	59,136	60,734	58,441	58,795
Northumberland,	14,583	13,833	14,697	15,105	14,187	14,863	14,580	14,345	15,208	14,730	15,709
Schuylkill,	35,586	34,238	33,392	33,259	33,907	34,950	33,443	35,979	40,465	40,289	39,870
Sullivan,	327	321	465	521	434	752	648	665	536	634	719
Susquehanna,	1,234	1,193	1,210	1,250	1,409	1,386	1,367	1,392	1,307	1,320	1,275
Wayne,	....	....	466	11	589	....	253	366	370	384	463
Totals,	149,557	142,420	140,604	143,824	147,651	148,139	151,827	161,330	168,254	166,175	168,774

TABLE K.—Production of coal in tons, by counties, 1885 to 1907, inclusive

Counties	1885	1886	1887	1888	1889	1890	1891	1892
Carbon,	688,098	1,164,970	869,026	1,592,865	1,227,908	1,226,541	1,191,158	1,427,543
Columbia,	612,580	601,731	740,315	712,821	515,019	599,404	761,559	889,490
Dauphin.	561,653	407,864	625,708	579,941	605,773	577,490	633,569	639,879
Lackawanna,	7,174,412	7,401,289	8,925 779	10,125,019	8,770,807	9,374,359	10,184,348	11,410,554
Luzerne,	14,787,379	14,616,101	15,009,747	17,270,224	15,934,395	15,825,674	17,726,560	17,548,508
Northumberland,	2,561,135	2,250,822	2,844,390	2,994,223	2,973,548	3,098,547	3,672,828	3,724,234
Schuylkill,	7,546,255	7,876,003	8,359,953	8,055,708	8,613,283	9,045,216	9,758,111	9,564,534
Sullivan,	119,612	61,767	92,679	84,030	71,390	63,746	74,884	76,009
Susquehanna,	84,459	97,071	176,421	213,595	261,827	315,350	369,713	457,622
Wayne,	....	....	....	....	....	....	3,450	....
Totals,	34,135,583	34,777,618	37,644,018	41,628,426	38,973,950	40,166,327	44,376,180	45,738,373

Counties	1893	1894	1895	1896	1897	1898	1899	1900
Carbon,	1,510.289	1,589,395	1,577,146	1,488,550	1,327,235	1,445,288	1,630,595	1,663.961
Columbia,	741,991	510,537	493,042	443,330	481,453	569,175	895,061	875,643
Dauphin.	640,723	699,607	712,856	702.335	662.842	677,460	729,757	695,656
Lackawanna,	11,667,550	11,170,382	11,859,382	11,638,479	11,946,871	11,589,001	13,248,949	12,282.108
Luzerne,	18,253,145	17,243,928	19,143,101	17,964,900	17,141,809	17,793,773	19,899,742	19,179.573
Northumberland,	3,731,405	3,893,660	4,573,144	4,117.569	3,774,667	3,519,305	4,339,547	4,188.343
Schuylkill,	9,932,086	9,985,092	11,495,388	11,092,772	10,971,943	10,980,700	12,226,938	11,606.160
Sullivan,	70,418	....	152,141	151,758	164,046	147,533	163,555	209,922
Susquehanna,	571,956	413,578	840,904	474,637	476,488	422,939	624,125	496,432
Wayne,	....	....	....	....	....	....	275,955	19,520
Totals,	47,179,563	45,506,179	50,847,104	48,074,330	46,947,354	47,145,174	54,034,224	51,217,318

TABLE K.—Continued

Counties	1901	1902	1903	1904	1905	1906	1907
Carbon,	1,659,392	986,127	1,919,662	2,012,064	2.211,077	2,006,092	2,466,538
Columbia,	1,080,231	658,991	1,208,843	1,028.236	1,097,944	865,237	1,060,954
Dauphin,	741,582	377,983	654,437	645,906	645,648	656,003	741,051
Lackawanna,	15,409,040	10,581,401	17,898,333	16,971,096	17,597,468	16,821,929	20,029,829
Luzerne,	21,396,312	13,016,026	24,891,394	24,736,864	26,779,139	23,760,886	27,547,399
Northumberland,	4,849,099	2,823,273	4,927,304	4,925,578	4,895,697	4,792,408	5,951,243
Schuylkill,	13,640,766	7,698,306	14,663,487	14,440,320	16,049,250	14,621,909	18,000,866
Sullivan,	136,165	365,194	262,002	262,772	277,229	320,203	386,697
Susquehanna,	663,487	404,248	714,976	618.250	607,273	501,877	575,079
Wayne,	329,877	....	61,513	68,172	59,829	63,733	76,423
Totals,	59,905,951	36,911,549	67,171,951	65,709,258	70,220,554	64,410,277	76,836,082

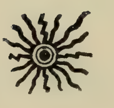
Table L.—Fatal accidents for each 1,000 employes in and about the mines and tons of coal mined for each fatal accident, 1870 to 1907, inclusive

Years	Employes	Fatal accidents	Fatal accidents per 1,000 employes	Number of tons of coal mined	Number of tons of coal mined for each fatal accident.
1870,	35,600	211	5.93	12,653,575	59,970
1871,	37,488	210	5.60	13,868,087	66,039
1872,	44,745	223	4.98	13,899,976	62,332
1873,	48,199	264	5.48	18,751,358	71,028
1874,	53,402	231	4.33	17,794,857	77,034
1875,	69,966	238	3.40	20,895,220	87,795
1876,	70,474	228	3.24	20,929,166	86,013
1877,	66,842	194	2.90	22,077,869	113,803
1878,	63,964	187	2.92	18,661,577	99,795
1879,	68,847	262	3.81	27,711,250	105,768
1880,	73,373	202	2.75	24,977,261	123,650
1881,	76,031	273	3.59	30,537,998	111,861
1882,	82,200	291	3.54	31,301,277	107,565
1883,	91,421	323	3.53	33,703,008	104,344
1884,	101,073	332	3.28	32,561,373	98,076
1885,	100,320	332	3.31	34,135,583	102,818
1886,	103,044	279	2.71	34,777,618	124,651
1887,	106,517	316	2.97	37,644,018	119,127
1888,	122,218	364	2.98	41,638,426	114,391
1889,	119,964	397	3.32	38,973,950	98,171
1890,	119,919	378	3.15	40,166,327	106,260
1891,	123,308	428	3.47	44,376,180	103,683
1892,	130,300	418	3.21	45,738,373	109,422
1893,	138,069	456	3.30	47,179,563	103,464
1894,	139,939	446	3.19	45,506,179	102,032
1895,	143,705	421	2.93	50,847,104	120,777
1896,	150,088	502	3.34	48,074,330	95,766
1897,	149,557	423	2.83	46,947,354	110,987
1898,	142,420	411	2.89	47,154,174	114.708
1899,	140,604	461	3.28	54,034,224	117,211
1900,	143,824	411	2.86	51,217,318	124,616
1901,	147,651	513	3.47	59,905,951	116,775
1902,	148,139	300	2.03	36,911,549	123,038
1903,	151,827	518	3.41	67,171,951	129,675
1904,	161,330	595	3.69	65,709,258	110,436
1905,	168,254	644	3.83	70,220,554	109,038
1906,	166,175	557	3.35	64,410,277	115 638
1907,	168,774	708	4.20	76,836,082	108,526

Summary of the work of the Department of Mines

	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907
Letters written, copied and indexed,	922	697	1,854	1,465	1,733	2,901	3,036	3,190	3,262	4,535
Letters received, docketed and filed,	1,216	972	1,342	1,690	1,924	2,328	2,649	3,023	3,218	2,915
Blanks sent to mine inspectors,	30,570	42,394	76,428	67,408	51,806	89,050	55,844	57,567	99,187	85,664
Letterheads and envelopes sent to mine inspectors,	7,200	26,188	26,750	23,200	21,750	93,000	30,000	61,600	58,550	68,250
Rules, general and special, sent to bituminous mine inspectors,	500	2,012	2,165	390	4,830	2,080	....	960	2,190	2,915
Mine foremen's record books, 300 pages each, sent to bituminous mine inspectors,	275	279	400	30	618	173	37	178	160	355
Fire bosses' daily record books, 250 pages each, sent to bituminous mine inspectors,	50	....	200	15	378	90	....	30	40	112
Annual reports of the Department of Mines shipped from office,	522	1,830	1,735	2,303	1,987	4,052	8,115	5,933	14,298	5,312
Mine laws in English, pamphlet form, sent to mine inspectors,	....	1,358	....	....	....	11,250	40,500	75	14,215	110
Monthly narratives, 31 pages each, sent to mine inspectors,	....	171	455	517	....	475	525	400	553	555
Books for recording accidents, 400 pages each, sent to mine inspectors,	....	18	17	17	....	11	....	1	6	3
Reports of accidents received, copied and filed,	....	2,235	2,350	2,719	2,211	3,293	3,085	3,502	3,406	4,171
Reports of inspectors received, copied and filed,	....	3,846	3,318	3,486	2,996	5,312	5,474	4,977	5,353	7,093
Daily reports of inspectors, showing duties performed and expenses incurred, copied and filed,	....	5,416	5,627	6,024	6,213	9,360	9,360	11,040	11,544	12,727
Vouchers for incidental and other expenses compared and delivered to Auditor General,	....	576	644	656	926	1,640	1,780	1,860	1,878	2,015
Anthracite mine laws translated into foreign languages and distributed,	....	....	....	....	57,250	22,325	64,700	....	....	....
Bituminous mine laws translated into foreign languages and distributed,	....	....	....	....	....	57,000	29,200	....	....	....
Books of mine foremen's and assistant mine foremen's certificates, 300 pages each, sent to mine inspectors,	....	....	....	....	....	60	....	....	14	4
Mine laws in English, pamphlet form, distributed,	....	....	....	....	....	38,000	....	378	632	91
Mine inspectors' annual reports received, corrected and compiled for publication,	18	18	18	20	20	30	30	30	37	40
Certificates of qualification issued to mine foremen and assistant mine foremen in the anthracite region, after being recorded,	127	181	70	206	235	690	196	272	254	153
Certificates of qualification issued to mine foremen of first grade and mine foremen of second grade in the bituminous region, after being recorded,	....	....	....	....	....	768	383	264	165	229

ANTHRACITE DISTRICTS



First District

LACKAWANNA, SUSQUEHANNA AND WAYNE COUNTIES

Carbondale, Pa., February 24, 1908.

Hon. James E. Roderick, Chief of Department of Mines:

Sir: I have the honor to transmit herewith my report as Inspector of Mines for the First Anthracite District, for the year ending December 31, 1907. Accompanying the report will be found the usual tables of statistics and other matters as provided in the Act of April 14, 1903.

Respectfully submitted,

P. J. MOORE, Inspector.

SUMMARY OF STATISTICS

Number of collieries,	23
Number of mines,	52
Number of mines in operation,	52
Number of tons of coal shipped to market,	3,607,590
Number of tons used at mines for steam and heat,	312,575
Number of tons sold to local trade and used by employes,	45,761
Number of tons produced,	3,965,926
Number of tons produced by compressed air machines,	—
Number of tons produced by electrical machines,	—
Number of persons employed inside of mines,	6,498
Number of persons employed outside,	2,202
Number of fatal accidents inside of mines,	39
Number of fatal accidents outside,	5
Number of non-fatal accidents inside of mines,	44
Number of non-fatal accidents outside,	7
Number of tons of coal produced per fatal accident inside,	101,690
Number of persons employed per fatal accident inside,	167
Number of persons employed per fatal accident outside	440
Number of persons employed per non-fatal accident inside,	147
Number of persons employed per non-fatal accident outside,	314
Number of wives made widows,	26
Number of children orphaned,	61
Number of steam locomotives used inside of mines,	2
Number of steam locomotives used outside,	16
Number of compressed air locomotives used inside,	11
Number of electric motors used inside,	30
Number of fans in use,	38
Number of gaseous mines in operation,	1
Number of non-gaseous mines in operation,	51
Number of new mines opened,	1
Number of old mines abandoned,	1

TABLE A

PRODUCTION OF COAL

Names of Operators	Tons
Delaware and Hudson Company,	2,137,797
Hillside Coal and Iron Company,	899,664
Scranton Coal Company,	542,381
Temple Iron Company,	209,295
Humbert Coal Company,	89,854
Northeast Coal Company,	26,595
Morss Hill Coal Cmpany,	23,529
Carbondale Coal Company,	17,977
Barton Coal Company,	7,074
Clinton Falls Coal Company,	6,423
Finn Coal Company,	4,100
Archbald Coal Company,	1,237
Total,	3,965,926

Production by Counties

Lackawanna,	3,314,424
Susquehanna,	575,079
Wayne,	76,423
Total,	3,965,926

TABLE B.—Fatal and non-fatal accidents inside and outside of mines; number of tons of coal produced per accident; number of persons employed; number employed per accident

Names of Operators	Fatal Accidents			Non-fatal Accidents			Tons of coal produced per fatal accident inside	Tons of coal produced per non-fatal accident inside	Number of employes inside	Number of employes outside	Total number of employes	Number of employes inside per fatal accident	Number of employes outside per fatal accident	Number of employes inside per non-fatal accident	Number of employes outside per non-fatal accident
	Inside	Outside	Total	Inside	Outside	Total									
Delaware and Hudson Co.,	13	1	14	22	5	27	164,446	97,172	3,318	992	4,310	255	992	151	198
Hillside Coal and Iron Co.,	14	1	15	9	1	10	64,262	99,963	1,539	532	2,071	110	532	171	532
Scranton Coal Co.,	6	1	7	3	1	4	90,397	180,794	955	364	1,319	159	364	318	364
Temple Iron Co.,	5	....	5	8	....	8	41,859	26,162	298	80	378	59	....	37	....
Humbert Coal Co.,	1	....	1	1	....	1	89,854	89,854	66	52	118	66	....	66	....
Morss Hill Coal Co.,	....	1	1	1	....	1	....	23,529	82	42	124	....	42	82	....
Finn Coal Co.,	....	1	1	....	....	....	....	....	59	22	81	....	22	....	....
Totals and averages for district,	39	5	44	44	7	51	101,690	90,135	6,498	2,202	8,700	167	440	147	314

TABLE C.—Classification of Fatal Accidents Inside and Outside of Mines

	Months													
	January	February	March	April	May	June	July	August	September	October	November	December	Totals	Percentages
Causes of Accidents Inside														
Falls of coal,	....	....	....	1	2	....	1	....	1	....	....	1	6	15.38
Falls of roof,	2	....	1	1	3	2	6	2	2	1	2	....	22	56.41
Mine cars,	....	1	....	1	1	....	....	....	....	....	....	1	4	10.25
Explosions of powder and dynamite,	....	....	....	1	...	....	....	....	....	....	....	....	1	2.57
Premature blasts,	...	1	....	....	....	1	....	....	....	....	....	1	3	7.69
By mules,	....	1	....	....	....	....	....	....	....	....	....	....	1	2.57
Miscellaneous,	1	....	....	....	....	....	....	....	....	....	1	....	2	5.13
Totals,	3	3	1	4	6	3	7	2	3	1	3	3	39	100.00
Causes of Accidents Outside														
Cars,	....	....	....	....	....	....	....	1	....	....	....	....	1	20.00
Machinery,	....	1	....	....	....	....	1	....	....	....	....	1	3	60.00
Miscellaneous,	....	....	....	....	..	....	....	...	....	....	1	....	1	20.00
Totals,	....	1	....	....	....	....	1	1	....	....	1	1	5	100.00
Grand totals inside and outside,	3	4	1	4	6	3	8	3	3	1	4	4	44	

TABLE D.—Classification of Non-fatal Accidents Inside and Outside of Mines

	Months													
	January	February	March	April	May	June	July	August	September	October	November	December	Totals	Percentages
Causes of Accidents Inside														
Falls of coal,	....	....	....	....	....	....	1	....	....	....	....	....	1	2.27
Falls of slate,	....	....	....	....	....	....	1	....	....	....	....	....	1	2.27
Falls of roof,	1	....	3	....	2	4	3	2	1	1	2	2	21	47.73
Mine cars,	....	....	3	....	....	....	....	....	....	2	1	1	7	15.90
Explosions of powder and dynamite,	....	1	....	....	....	....	....	....	....	....	1	1	3	6.82
Premature blasts,	2	2	....	....	....	....	....	....	....	1	....	....	5	11.37
By mules,	....	....	1	....	....	....	....	....	....	1	1	....	3	6.82
Miscellaneous,	....	1	....	....	....	....	....	....	....	....	1	1	3	6.82
Totals,	3	4	7	....	2	4	5	2	1	5	6	5	44	100.00
Causes of Accidents Outside														
Cars,	1	....	....	....	....	....	1	1	....	....	2	1	6	85.71
Miscellaneous,	....	....	....	....	1	....	....	....	....	....	....	....	1	14.29
Totals,	1	....	....	....	1	....	1	1	....	....	2	1	7	100.00
Grand totals inside and outside,	4	4	7	....	3	4	6	3	1	5	8	6	51	

TABLE E.—Occupations of Persons Killed or Fatally Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Inside													
Miners,	1	1	....	1	2	1	4	....	3	....	1	2	16
Miners' laborers,	2	....	1	2	3	2	3	1	....	1	2	1	18
Drivers and runners,	....	1	....	....	1	....	....	1	....	....	....	....	3
Company men,	....	....	....	1	....	....	....	....	....	....	....	....	1
All other employes	....	1	....	....	....	....	....	....	....	....	....	....	1
Totals,	3	3	1	4	6	3	7	2	3	1	3	3	39
Outside													
Slatepickers (boys),	....	1	....	....	....	....	1	....	....	....	....	1	3
All other employes,	....	....	....	....	....	....	....	1	....	....	1	....	2
Totals,	....	1	....	....	....	....	1	1	....	....	1	1	5
Grand totals inside and outside,	3	4	1	4	6	3	8	3	3	1	4	4	44

TABLE F.—Occupations of Persons Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Inside													
Miners,	2	2	3	....	1	3	3	2	....	2	2	1	21
Miners' laborers,	....	2	2	....	1	1	2	....	1	1	1	4	15
Drivers and runners,	1	....	2	....	....	....	....	....	....	2	3	....	8
Totals,	3	4	7	....	2	4	5	2	1	5	6	5	44
Outside													
Slatepickers (boys),	....	....	....	....	1	....	....	....	....	....	....	1	2
All other employes,	1	....	....	....	....	....	1	1	....	....	2	....	5
Totals,	1	....	....	....	1	....	1	1	....	....	2	1	7
Grand totals inside and outside,	4	4	7	....	3	4	6	3	1	5	8	6	51

TABLE G.—Nationality of Persons Killed or Fatally Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
American,	....	1	....	1	....	....	2	....	....	....	....	1	5
Scotch,	....	....	1	....	....	....	....	....	....	....	....	....	1
Irish,	....	....	....	1	2	....	....	....	....	....	....	....	3
German,	....	....	....	....	1	....	....	....	....	....	....	....	1
Polish,	1	....	....	....	1	....	2	3	1	....	1	1	10
Italian,	....	1	....	....	....	1	2	....	....	....	1	1	6
Slavonian,	....	....	....	....	....	....	....	....	....	....	1	....	1
Lithuanian,	1	....	....	1	1	....	1	....	....	....	....	....	4
Austrian,	....	1	....	....	....	1	....	....	1	....	1	....	4
Russian,	1	1	....	1	1	1	1	....	1	1	....	1	9
Totals,	3	4	1	4	6	3	8	3	3	1	4	4	44

TABLE H.—Nationality of Persons Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
American,	....	1	3	....	1	1	1	....	....	....	2	1	10
English,	....	1	1	....	....	....	....	....	....	....	....	....	2
Welsh,	1	....	....	....	....	....	....	....	....	....	....	....	1
Irish,	....	....	2	....	....	1	1	....	....	....	....	1	5
Polish,	2	1	1	....	2	....	1	....	1	3	1	2	14
Italian,	....	....	....	....	....	2	2	2	....	....	2	....	8
Slavonian,	....	....	....	....	....	....	....	....	....	1	....	....	1
Austrian,	....	....	....	....	....	....	....	1	....	....	2	2	5
Russian,	1	1	....	....	....	....	1	....	....	1	1	....	5
Totals,	4	4	7	....	3	4	6	3	1	5	8	6	51

TABLE I.—Operators and mines, kind of openings, type and size of fans, size of furnaces, volume of air produced by fan or furnace per minute, number of splits of air currents, and number of persons employed inside

Names of Operators and Mines	Kind of opening	Gaseous or non-gaseous	Method of ventilation	Diameter of fan in feet	Width of blades in feet	Depth of blades in feet	Number of revolutions per minute	Water gauge developed—in inches	Name of fan	Power used	Number of splits of air currents	Number of cubic feet of air per minute entering the mine at inlet	Total quantity of air per minute circulating in all the splits in cubic feet	Number of persons employed inside
Delaware and Hudson Co.														
Coal Brook Colliery:														
Coal Brook No. 1,	Tunnel,	Non-gas.,	Fan,	20	5	6	75	1.7	Guibal,	Steam,	1	23,800	22,000	75
Coal Brook No. 1 Grassy,	Drift,		Fan,	17	4.5	4.5	90	1.2		Electricity,	4	74,220	65,875	90
Coal Brook No. 2 Grassy,	Tunnel,		Fan,	20	5	6	75	1.7		Electricity,	1	22,860	20,840	60
Coal Brook No. 3 Grassy,	Tunnel,		Fan,	10	3	3	90	.6		Electricity,	1	15,500	14,400	35
Coal Brook Wilces,	Tunnel,		Fan,	17	4	5	75	1.6		Electricity,	1	27,890	23,900	50
Coal Brook Wilson Creek,	Tunnel,		Fan,	20.5	5	6	90	1.9		Steam,	5	76,610	70,730	158
Coal Brook No. 1 Top Vein,	Tunnel,		Fan,	17	4	5	75	1.6		Electricity,	1	21,740	17,860	100
Coal Brook No. 1 Pattens,*	Tunnel,		Fan,	20.5	5	6	90	1.9		Steam,	1	37,000	35,000	105
Coal Brook No. 2 Pattens,*	Tunnel,		Fan,	20.5	5	6	90	1.9		Steam,	1	35,000	32,000	108
Coal Brook No. 3 Pattens,	Tunnel,		Fan,	12	3	4	75	1.2		Electricity,	1	34,000	30,000	107
Clinton Colliery:														
Clinton, North Klondike,	Tunnel,	Non-gas.,	Fan,	10	3	3	112	.6	Guibal,	Steam,	1	29,720	26,856	102
Clinton, South Klondike,	Tunnel,		Fan,	10	3	3	112	.5		Steam,	1	31,262	27,476	104
Clinton, River Side,	Slope,		Fan,	20	5	6	75	1.4		Steam,	3	65,124	62,798	178
Clinton, Long Slope,	Slope,		Fan,	17	4	5	110	1.6		Steam,	4	69,412	67,098	190
Clinton, Grassy Vein,	Slope,		Fan,	20	5	6	55	.9		Steam,	2	50,152	47,816	63

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*Ventilated by fan at Coal Brook, Wilson Creek.

Powderly Colliery:														
Jermyn,	Shaft,	Non-gas.,	Fan,	20 22	5 5	6 6	90 75	1.4 1.5	Guibal,	Steam, Steam,	4 5	92,710 162,590	90,020 105,980	290 296
Powderly,	Drift,	Non-gas.,	Natural,	....	....	....	....	....	....	....	2	22,173	19,779	100
Powderly,	Tunnel,		Natural,	....	....	....	....	....	....	....	1	18,755	14,322	143
Powderly,	Slope,		Fan,	17	4	5	64	.5	Guibal,	Steam,	4	49,740	44,730	130
White Oak Colliery:														
White Oak No. 1,	Tunnel,	Non-gas.,	Fan,	17	5	5	70	.7	Guibal,	Steam,	3	73,500	47,400	120
White Oak No. 7,	Tunnel,		Natural,	....	....	....	....	....	....	....	1	43,200	19,200	65
White Oak No. 12,	Tunnel,		Fan,	20	5	6	70	1.0	Guibal,	Steam,	1	20,520	14,580	96
White Oak No. 6,	Tunnel,		Natural,	....	....	....	....	....	....	....	1	22,500	20,000	187
No. 1 Carbondale Colliery:														
Carbondale No. 1,	Tunnel,	Non-gas.,	Fan,	10	3	3	120	.5	Guibal,	Electricity,	4	85,000	80,000	200
Carbondale No. 1,	Slope,		Fan,	10	3	3	160	.8	Guibal,	Electricity,	2	75,640	70,400	166
Hillside Coal and Iron Co.														
Forest City Colliery:														
Forest City No. 2,	Shaft,	Non-gas.,	Fan,	24	7	7	65	.7	Guibal,	Steam,	7	133,069	121,840	502
Forest City,	Slope,		Fan,	14	6	5	100	1.0		Steam,	2	31,300	29,000	111
Clifford,	Shaft,	Non-gas.,	Fan,	18	5	5	100	1.0		Steam,	5	75,418	67,932	357
Erie,	Shaft,		Fans,	12 24	4 6	4 5	85 75	.6 .8		Electricity & steam,	5	115,940	82,780	330
Glenwood,	Shaft,		Fan,	18	5	5	80	.5		Steam,	4	83,300	59,300	214
Keystone,	Drift,		Natural,	....	....	....	....	....	....	....	2	98,100	89,200	25
Scranton Coal Co.														
Raymond Colliery:														
Raymond No. 1,	Slope,	Non-gas.,	Fan,	10	3	3	125	.75	Guibal,	Gasoline,	1	14,880	13,200	35
Raymond No. 2,	Slope,		Fan,	†10	3	3	125	.75	Guibal,	Gasoline,	1	17,475	16,000	40
Raymond No. 3,	Slope,		Natural,	....	....	....	....	....	....	....	1	18,500	16,500	65
Raymond No. 5,	Drift,		Natural,	....	....	....	....	....	....	....	1	25,000	22,000	75
Raymond No. 3,	Drift,		Fan,	10	3	3	100	.5	Guibal,	Steam,	1	15,000	12,000	70
Raymond, "Japan,"	Drift,		Fan,	10	3	3	110	.5		Steam,	1	12,400	10,000	62
Raymond,	Shaft,		Fan,	18	5	6	75	.5		Steam,	2	45,000	42,500	246
Riverside,	Shaft,	Gaseous,	Fan,	22	4	6	85	.4		Steam,	4	91,600	81,100	183
Black Diamond Colliery:														
Black Diamond No. 1,	Drift,	Non-gas.,	Fan,	12	4	4	80	.75	Guibal,	Steam,	1	10,000	8,750	30
Black Diamond No. 2,	Drift,		Fan,	‡12	4	4	80	.75		Steam,	1	20,000	18,750	54
Black Diamond No. 3,	Drift,		Fan,	‡12	4	4	80	.75		Steam,	1	12,000	8,000	45
Black Diamond No. 4,	Drift,		Fan,	‡12	4	4	80	.75		Steam,	1	18,000	16,000	50
Temple Iron Co.														
Northwest Colliery:														
Northwest No. 1,	Slope,	Non-gas.,	Fans,	16-20	4-5	5-6	60-75	1-4.1	Guibal,	Steam,	3	117,870	98,385	216
Northwest No. 2,	Slope,	Non-gas.,	Fan,	14	4	5	70	1		Steam,	2	46,900	42,835	82
Humbert Coal Co.														
Sunnyside,	Drift,	Non-gas.,	Natural,	....	....	....	....	....	....	....	1	27,500	25,200	66

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†Ventilated by fan at Raymond No. 1.
‡Ventilated by fan at Black Diamond No. 1.

TABLE I.—Continued

Names of Operators and Mines	Kind of opening	Gaseous or non-gaseous	Method of ventilation	Diameter of fan in feet	Width of blades in feet	Depth of blades in feet	Number of revolutions per minute	Water gauge developed—in inches	Name of fan	Power used	Number of splits of air currents	Number of cubic feet of air per minute entering the mine at inlet	Total quantity of air per minute circulating in all the splits in cubic feet	Number of persons employed inside
Northeast Coal Co. Northeast,	Drift,	Non-gas.,	Fan,	12	4	4	75	.5	Guibal,	Steam,	1	40,000	27,000	83
Morss Hill Coal Co. Morss Hill Nos. 1, 2, and 3,	Slopes,	Non-gas.,	Fan,	12	3	3	75	.7	Guibal,	Steam,	3	36,000	34,000	82
Carbondale Coal Co. Bolands,	Slope,	Non-gas.,	Natural,	......	......	......	......	......	......	......	1	10,000	8,000	24
Clinton Falls Coal Co. Clinton Falls Nos. 1 and 2,	Drifts,	Non-gas.,	Natural,	......	......	......	......	......	......	......	1	23,700	20,900	17
Barton Coal Co. Barton,	Drift,	Non-gas.,	Natural,	......	......	......	......	......	......	......	1	8,500	6,000	24
Finn Coal Co. Finn,	Drift,	Non-gas.,	Fan,	10	3	3	65	.1	Guibal,	Steam,	2	32,000	25,000	59
Archbald Coal Co. Tappans,	Drift,	Non-gas.,	Natural,	......	......	......	......	......	......	......	1	12,000	9,000	32

TABLE 1.—Operators, location of collieries, railroads, etc.

Names of Operators and Collieries	County	Name of General Superintendent	Post Office	Name of Superintendent	Post Office	Railroad to Mine
Delaware and Hudson Co.						
Clinton,	Lackawanna and Wayne,	C. C. Rose,	Scranton,	E. R. Pettebone,	Dorranceton,	Delaware and Hudson
Coal Brook,	Lackawanna,					
No. 1 Carbondale,	Lackawanna,					
Powderly,	Lackawanna,					
White Oak,	Lackawanna,					
Jermyn,	Lackawanna,					
Jermyn Washery,	Lackawanna,					
Racket Brook Washery,	Lackawanna,					
Hillside Coal and Iron Co.						
Clifford,	Susquehanna,	V. L. Petersen,	Scranton,	S. J. Jennings,	Forest City,	Erie
Forest City,	Susquehanna,			S. J. Jennings,	Forest City,	
Erie,	Lackawanna,			T. Parry,	Mayfield,	
Glenwood,	Lackawanna,			T. Parry,	Mayfield,	
Keystone,	Lackawanna,			T. Parry,	Mayfield,	
Erie Washery,	Lackawanna,			T. Parry,	Mayfield,	
Scranton Coal Co.						
Black Diamond,	Lackawanna,	W. L. Allen,	Peckville,	John Burkeiser,	Olyphant,	N. Y. O. and W.
Riverside,						
Raymond,						
Temple Iron Co.						
Northwest,	Lackawanna,	F. Hemelright,	Jermyn,	John White,	Carbondale,	N. Y. O. and W.
Edgerton Washery,						
Humbert Coal Co.						
Sunnyside,	Lackawanna,	M. F. Dolphin,	Scranton,	W. Langstaff,	Scranton,	Erie
Northeast Coal Co.						
Northeast,	Lackawanna,	J. B. Jordan,	Scranton,			N. Y. O. and W.
Morss Hill Coal Co.						
Morss Hill,	Lackawanna,	R. S. McMullen,	Carbondale,			Erie
Carbondale Coal Co.						
Bolands,	Lackawanna,	John Boland,	Dunmore,			Delaware and Hudson
Clinton Falls Coal Co.						
Clinton Falls,	Wayne,	John Cure,	Jermyn,			N. Y. O. and W.

TABLE 1—Continued

Names of Operators and Collieries	County	Name of General Superintendent	Post Office	Name of Superintendent	Post Office	Railroad to Mine
Barton Coal Co. Barton,	Lackawanna,	W. Barton,	Carbondale,			Delaware and Hudson
Finn Coal Co. Finn,	Lackawanna,	W. M. Finn,	Scranton,			N. Y. O. and W.
Archbald Coal Co. Tappans,	Lackawanna,	W. C. Munroe,	Scranton,			N. Y. O. and W.

TABLE 2.—Number of tons of coal mined, number of days worked, number of persons employed, number killed and injured, quantity of powder and dynamite used, etc.

Names of Operators and Collieries	County	Number of tons of coal shipped to market	Number of tons used at collieries for steam and heat	Number of tons sold to local trade and used by employes	Total production of coal in tons	Number of days worked	Number of employes	Number of fatal accidents	Number of non-fatal accidents	Number of kegs of powder used	Number of pounds of dynamite used	Number of horses and mules
Delaware and Hudson Co.												
Clinton,	Lackawanna and Wayne,	338,069	29,200	2,392	369,661	266	777	2	5	17,629	66,284	79
Coal Brook,	Lackawanna,	522,058	22,685	....	544,743	277	1,186	2	5	19,555	9,639	72
No. 1 Carbondale,*	Lackawanna,	....	....	....	....	260	470	2	5	4,929	10,761	55
Powderly,	Lackawanna,	355,476	27,752	....	383,228	265	524	2	2	2,361	7,760	51
White Oak,	Lackawanna,	197,321	9,741	2,795	209,857	223	591	2	8	7,706	39,673	55
Jermyn,	Lackawanna,	394,716	33,390	4,240	432,346	274	716	4	2	10,378	1,627	55
		1,807,640	122,768	9,427	1,939,835	....	4,264	14	27	62,558	135,744	367
Washeries:												
Jermyn,	Lackawanna,	50,072	424	....	50,496	....	16	......	......	....	....	......
Racket Brook,	Lackawanna,	131,407	16,059	....	147,466	....	30	......	......	....	....	......
		181,479	16,483	....	197,962	....	46	......	......	....	....	......
Totals,	....	1,989,119	139,251	9,427	2,137,797	....	4,316	14	27	62,558	135,744	367
Hillside Coal and Iron Co.												
Clifford,	Susquehanna,	253,877	15,427	151	269,455	236	496	4	2	8,167	26,894	42
Forest City,†	Susquehanna,	267,078	29,076	9,470	305,624	252	779	8	5	14,668	30,934	55
Erie,	Lackawanna,	111,476	20,552	1,827	133,855	221	439	2	......	5,190	26,192	39
Glenwood,	Lackawanna,	80,438	25,292	....	105,730	189	296	1	3	3,763	7,010	26
Keystone,	Lackawanna,	8,433	392	....	8,825	66	41	......	......	207	....	2
		721,302	90,739	11,448	823,489	....	2,051	15	10	31,995	91,030	164

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*Coal prepared at Powderly.

†Some coal prepared at Clifford.

TABLE 2.— Continued

Names of Operators and Collieries	County	Number of tons of coal shipped to market	Number of tons used at collieries for steam and heat	Number of tons sold to local trade and used by employes	Total production of coal in tons	Number of days worked	Number of employes	Number of fatal accidents	Number of non-fatal accidents	Number of kegs of powder used	Number of pounds of dynamite used	Number of horses and mules
Erie Washery,	Lackawanna,	76,175	......	......	76,175	......	20	......	......	......	......	......
Totals,	......	797,477	90,739	11,448	899,664	......	2,071	15	10	31,995	91,030	164
Scranton Coal Co.												
Black Diamond,	Lackawanna,	59,049	3,400	3,524	65,973	180	242	......	2	5,450	12,200	23
Riverside,		76,480	20,075	839	97,394	226	248	......	......	4,763	6,975	32
Raymond,		351,911	25,650	1,453	379,014	253	829	7	2	12,425	21,500	62
Totals,	......	487,440	49,125	5,816	542,381	......	1,319	7	4	22,638	40,675	117
Temple Iron Co.												
Northwest,	Lackawanna,	120,529	9,820	590	130,939	170	362	5	8	7,191	12,468	54
Edgerton Washery,		73,467	4,550	339	78,356	......	16	......	......	......	......	3
Totals,	......	193,996	14,370	929	209,295	......	378	5	8	7,191	12,468	57
Humbert Coal Co.												
Sunnyside,	Lackawanna,	79,057	10,480	317	89,854	227	118	1	1	2,128	200	10
Northeast Coal Co.												
Northeast,	Lackawanna,	23,235	3,360	......	26,595	205	124	......	......	1,610	......	7
Morss Hill Coal Co.												
Morss Hill,	Lackawanna,	14,775	2,500	6,254	23,529	234	124	1	1	1,554	5,275	11
Carbondale Coal Co.												
Bolands,	Lackawanna,	9,544	1,450	6,983	17,977	286	63	......	......	450	2,000	5

Barton Coal Co.													
Barton,	Lackawanna,	3,550	600	2,924	7,074	150	36	......	......	375	200	3
Clinton Falls Coal Co.													
Clinton Falls,	Wayne,	4,877	....	1,546	6,423	192	30	......	......	300	....	8
Finn Coal Co.													
Finn,	Lackawanna,	3,500	500	100	4,100	53	81	1	......	300	150	8
Archbald Coal Co.													
Tappans,	Lackawanna,	1,020	200	17	1.237	20	46	......	......	30	100	5
Grand totals,	....	3,607,590	312,575	45,761	3,965,926	....	8,700	44	51	131,129	287,842	762

TABLE 2.—Part 2

Names of Operators	County	Number of Boilers					Locomotives			Number of steam engines of all classes	Total horse power	Number of pumps delivering water to surface	Capacity in gallons per minute	Quantity delivered to surface per minute—gallons	Number of electric dynamos	Number of air compressors
		Cylindrical	Horse power	Tubular	Horse power	Total horse power	Steam	Air	Electric							
Delaware and Hudson Co.,	Lackawanna and Wayne,	67	1,928	33	4,425	6,353	9	11	14	104	5,980	31	37,900	11,100	3	5
Hillside Coal and Iron Co.,	Lackawanna,*.	10	166	41	4,020	4,186	3	......	14	56	8,665	25	14,020	12,340	7	....
Scranton Coal Co.,	Lackawanna,	9	180	17	1,760	1,940	3	......	2	32	2,107	8	19,200	9,525	1	2
Temple Iron Co.,	Lackawanna,	6	222	3	750	972	2	......	......	12	990	......	....	....	1	2
Humbert Coal Co.,	Lackawanna,	......	....	4	300	300	1	......	......	5	170	......	....	....	....	....
Northeast Coal Co.,	Lackawanna,	......	....	2	250	250	......	......	......	6	185	......	....	....	....	....
Morss Hill Coal Co.,	Lackawanna,	......	....	3	300	300	......	......	......	3	185	2	150	75	1	....
Carbondale Coal Co.,	Lackawanna,	......	....	2	145	145	......	......	......	3	125	1	85	50	....	....
Barton Coal Co.,	Lackawanna,	......	....	1	150	150	......	......	......	3	100	......	....	....	....	....
Finn Coal Co.,	Lackawanna,	1	100	....	....	100	......	......	......	......	....	1	150	150	....	....
Archbald Coal Co.,	Lackawanna,	......	....	1	100	100	......	......	......	3	75	......	....	....	....	....
Clinton Falls Coal Co.,	Wayne,	......	....	1	60	60	......	......	......	......	....	......	....	....	....	....
Totals,		93	2,596	108	12,260	14,856	18	11	30	227	18,582	68	71,505	33,240	13	9

*Susquehanna.

Table 3.—Number of each class of employes inside and outside of mines

Names of Operators and Collieries	County	Inside											Outside									
		Mine foremen	Assistant mine foremen	Fire bosses and assistants	Miners	Miners' laborers	Drivers and runners	Doorboys and helpers	Pumpmen	Company men	All other employes	Total inside	Superintendents	Foremen	Blacksmiths and carpenters	Engineers and firemen	Slate pickers (boys)	Slate pickers (men)	Bookkeepers and clerks	All other employes	Total outside	Grand total inside and outside
Delaware and Hudson Co.																						
Clinton,	Lackawanna and Wayne,	1	3	...	200	256	93	21	4	44	15	637	....	1	6	14	11	44	2	62	140	777
Coal Brook,	Lackawanna,	1	4	...	286	304	100	27	2	121	43	888	....	1	14	24	14	96	4	145	298	1,186
No. 1 Carbondale,	Lackawanna,	1	2	...	96	155	44	4	2	50	12	366	....	1	6	11	7	3	2	74	104	470
Powderly,	Lackawanna,	1	1	...	112	169	52	4	2	28	4	373	....	1	4	11	23	40	2	70	151	524
Jermyn,	Lackawanna,	1	2	...	212	216	88	15	2	40	10	586	....	1	8	12	17	27	2	63	130	716
White Oak,	Lackawanna,	1	2	...	145	219	60	8	2	27	4	468	....	1	4	11	30	5	2	70	123	591
		6	14	...	1,051	1,319	437	79	14	310	88	3,318	....	6	42	83	102	215	14	484	946	4,264
Washeries:																						
Jermyn,	Lackawanna,	....	....	...	.....	......	......	......	....	......	......	....	....	...	1	1	.....	2	...	12	16	16
Racket Brook,	Lackawanna,	....	....	...	.....	......	......	......	....	......	......	....	....	1	....	2	1	5	1	20	30	30
											......	....	....	1	1	3	1	7	1	32	46	46
Totals,		6	14	...	1,051	1,319	437	79	14	310	88	3,318	....	7	43	86	103	222	15	516	992	4,310
Hillside Coal and Iron Co.																						
Clifford,	Susquehanna,	1	1	...	144	108	49	3	3	......	48	357	....	1	3	8	14	22	2	89	139	496
Forest City,	Susquehanna,	3	2	...	236	213	35	5	6	73	40	613	1	1	8	13	24	13	2	104	166	779
Erie,	Lackawanna,	1	1	...	106	156	29	......	4	2	31	330	1	1	7	12	11	14	2	61	109	439
Glenwood,	Lackawanna,	1	....	...	93	71	24	2	6	17	......	214	....	1	3	11	15	13	...	39	82	296
Keystone,	Lackawanna,	1	....	...	7	11	4	......	....	......	2	25	....	....	2	2	2	1	1	8	16	41
Erie Washery,	Lackawanna,	....	....	...	.....	......	......	......	....	......	......	....	....	...	...	......	......	......	....	20	20	20
Totals,		7	4	...	586	559	141	10	19	92	121	1,539	2	4	23	46	66	63	7	321	532	2,071

TABLE 3.—Continued

Names of Operators and Collieries	County	Inside											Outside									
		Mine foremen	Assistant mine foremen	Fire bosses and assistants	Miners	Miners' laborers	Drivers and runners	Doorboys and helpers	Pumpmen	Company men	All other employes	Total inside	Superintendents	Foremen	Blacksmiths and carpenters	Engineers and firemen	Slate pickers (boys)	Slate pickers (men)	Bookkeepers and clerks	All other employes	Total outside	Grand total inside and outside
Scranton Coal Co.																						
Black Diamond, ...	Lackawanna,.	1	....	...	72	61	26	4	....	......	15	179	....	1	4	5	25	......	1	27	63	242
Riverside, ...		1	1	1	94	42	20	6	4	......	14	183	....	1	4	13	16	1	1	29	65	248
Raymond, ...		1	1	...	223	245	68	7	5	......	43	593	1	1	9	23	80	20	2	100	236	829
Totals, ...	....	3	2	1	389	348	114	17	9	......	72	955	1	3	17	41	121	21	4	156	364	1,319
Temple Iron Co.																						
Northwest, ...	Lackawanna,.	2	....	...	125	100	35	6	4	13	13	298	1	1	6	7	15	3	2	29	64	362
Edgerton Washery, ...		....	....	...	.....	......	......	......	....	......	......	....	....	...	....	2	......	1	1	12	16	16
Totals, ...	....	2	....	...	125	100	35	6	4	13	13	298	1	1	6	9	15	4	3	41	80	378
Humbert Coal Co.																						
Sunnyside, ...	Lackawanna,...	1	....	...	25	20	10	......	....	8	2	66	1	1	5	6	15	......	1	23	52	118
Northeast Coal Co.																						
Northeast, ...	Lackawanna,...	1	....	...	34	20	19	5	....	2	2	83	1	1	2	4	6	......	1	26	41	124
Morss Hill Coal Co.																						
Morss Hill, ...	Lackawanna,...	1	....	....	31	28	17	1	....	4	......	82	1	1	4	5	8	1	2	20	42	124
Carbondale Coal Co.																						
Bolands, ...	Lackawanna,...	1	....	....	10	10	2	......	....	1	......	24	1	2	1	4	4	1	1	25	39	63
Barton Coal Co.																						
Barton, ...	Lackawanna,...	1	....	....	8	10	4	......	....	1	......	24	1	1	1	1	3	2	1	2	12	36

Clinton Falls Coal Co.																						
Clinton Falls,	Wayne,	1	....	....	9	5	3	......	....	......	......	13	1	1	....	1	4	......	....	5	12	30
Finn Coal Co.																						
Finn,	Lackawanna,	1	....	....	25	20	8	2	1	2	......	59	1	1	1	3	10	......	1	5	22	81
Archbald Coal Co.																						
Tappans,	Lackawanna,	1	....	....	5	10	1	......	....	......	15	32	1	1	2	3	3	......	1	3	14	46
Grand totals,		26	20	1	2,298	2,449	791	120	47	433	313	6,498	12	24	105	209	358	314	37	1,143	2,202	8,700

TABLE 3. —Part 2

Names of Operators and Collieries	County	Number of Days Worked in Breaker												
		January	February	March	April	May	June	July	August	September	October	November	December	Total
Delaware and Hudson Co.														
Clinton,	Lackawanna and Wayne,	23	16	20	22	24	23	23	22	23	24	23	23	266
Coal Brook,	Lackawanna, ...	24	21	24	23	25	20	26	25	23	23	21	22	277
No. 1 Carbondale,	Lackawanna, ...	22	20	21	23	23	21	23	25	19	23	22	18	260
Powderly,	Lackawanna, ...	24	21	24	23	22	22	21	23	19	21	22	23	265
Jermyn,	Lackawanna, ...	22	23	22	24	24	23	20	23	23	24	24	22	274
White Oak,	Lackawanna, ...	19	14	19	18	20	19	21	15	18	21	20	19	223
Hillside Coal and Iron Co.														
Clifford,	Susquehanna, ..	19	19	21	19	20	21	22	21	17	17	20	20	236
Forest City,	Susquehanna, ..	22	17	21	22	22	22	23	21	19	22	20	21	252
Erie,	Lackawanna, ...	16	15	16	17	19	21	20	21	19	19	20	18	221
Glenwood,	Lackawanna, ...	15	14	16	17	17	18	16	19	17	16	18	6	189
Keystone,	Lackawanna, ...	13	12	15	14	12	....	....	....	....	....	....	....	66
Scranton Coal Co.														
Black Diamond,	Lackawanna,	13	13	16	15	15	15	16	16	15	15	16	15	180
Riverside,		22	18	21	19	19	18	19	19	18	19	18	16	226
Raymond,		22	20	23	22	23	12	22	22	22	23	21	21	253
Temple Iron Co.														
Northwest,	Lackawanna, ...	15	15	15	14	15	14	14	16	13	13	14	12	170
Humbert Coal Co.														
Sunnyside,	Lackawanna, ...	21	16	18	16	22	21	20	19	20	19	14	21	227
Northeast Coal Co.														
Northeast,	Lackawanna, ...	17	16	25	15	16	20	23	15	10	2	21	25	205
Morss Hill Coal Co.														
Morss Hill,	Lackawanna, ...	25	22	23	24	23	22	19	....	6	23	24	23	234

Carbondale Coal Co.														
Bolands,	Lackawanna,	24	24	24	23	23	24	23	25	25	25	23	23	286
Barton Coal Co.														
Barton,	Lackawanna,	15	13	16	20	24	22	10	....	....	3	18	9	150
Clinton Falls Coal Co.														
Clinton Falls,	Wayne,	23	21	20	....	....	19	10	18	19	21	21	20	192
Finn Coal Co.														
Finn,	Lackawanna,	15	14	12	....	....	....	....	....	....	....	....	12	53
Archbald Coal Co.														
Tappans.	Lackawanna,	....	....	....	....	....	....	....	....	....	....	3	17	20

TABLE 4.—Fatal accidents inside and outside of mines

Date of accident	Name of Person	Nationality	Occupation	Age	Married or single	Number of widows	Number of orphans	Name of Mine	County	Nature and Cause of Accident in Brief
Jan. 3	Stanley Potzeka,	Russian,	Laborer,	28	S.	...	....	Clinton,	Lackawanna,	Fatally injured by a timber that was projecting from both ends of an empty car. He was standing between the heading road and the road leading to his chamber and when the car went around the curve the timber struck his neck and cut his throat.
15	Stanley Penhalla,	Polish,	Miner,	36	M	1	4	No. 2 Forest City,	Susquehanna,	Fatally injured by a fall of roof while eating his dinner in a cross-cut in his chamber.
19	Joseph Colosunis,	Lithuanian,	Laborer,	36	M	1	....	No. 2 Forest City,	Susquehanna,	Fatally injured by a fall of roof while loading a car near face of working place. The assistant foreman and the miner erred in their judgment of the condition of the roof.
Feb. 7	Frank Gonifer,	Austrian,	Miner,	29	M.	1	2	Northwest,	Lackawanna,	Fatally injured by rock flying from a blast charged with dynamite. Exploded while tamping with an iron bar.
8	Salvator Scalzo,	Italian,	Slatepicker,	15	S.	....	....	Finn,	Lackawanna,	Fatally injured by falling into a small pair of cogs in the breaker. The verdict of inquest was accidental death.
20	Joseph Pickard,	American,	Motorman,	30	M.	1	2	Raymond,	Lackawanna,	Fatally injured by a loaded car. The car jumped off the track and caught him on the side of heading where he jumped off the motor.
28	Michael Brienoc,	Russian,	Driver,	18	S.	....	....	Northwest,	Lackawanna,	Fatally injured by a kick from a mule he was driving in the mines.
March 28	Thomas Muir,	Scotch,	Laborer,	38	M.	1	....	No. 1 Carbondale,	Lackawanna,	Fatally injured by a fall of roof while drilling a hole in the bottom back eight feet from the face of working place.

April	13	Patrick Moran,	Irish,	Miner,	34	M.	1	2	No. 2 Forest City,	Susquehanna,	Fatally injured by an explosion of dynamite powder while thawing it with a mining lamp. His laborer stated that Moran held several sticks of the powder over his lamp to thaw them and then threw them into a box containing twenty more sticks. He noticed the powder burning in the box and attempted to remove a box of caps, and while doing so the powder exploded, cutting him to pieces.
	15	Daniel Surbo,	Lithuanian,	Footman,	22	S.	....	....	Clifford,	Susquehanna,	Fatally injured by falling off mine cars while riding on a tail rope line. He was forbidden to ride on the front end of cars.
	22	John Krazel,	Russian,	Laborer,	27	S.	....	....	Northwest,	Lackawanna,	Fatally injured by a fall of roof. He was assisting the miner to pull a piece down and was passing under the piece to get a drill when he was caught.
	23	Andrew Maloney,	American,	Laborer,	36	S.	....	....	White Oak,	Lackawanna,	Fatally injured by a fall of coal that was left projecting over a pillar. A miner who was working with him had been advised by the assistant mine foreman to take the coal down and said he had tried to do so.
May	1	James Biglin,	Irish,	Miner,	55	M.	1	....	Jermyn,	Lackawanna,	Fatally injured by a fall of top coal while loading a car at face of chamber.
	2	Thomas Hart,	Irish,	Miner,	67	M.	1	....	Jermyn,	Lackawanna,	Fatally injured by a fall of coal while standing watching his laborer bar out a shot.
	11	Charles Lascosky,	Polish,	Laborer,	28	M.	1	2	Jermyn,	Lackawanna,	Fatally injured by a fall of roof bell shaped near the face of a heading in which he was working.
	11	Stephen Seno,	Russian,	Laborer,	28	M.	1	2	Jermyn,	Lackawanna,	Fatally injured by a fall of roof bell shaped near the face of the heading in which he was working.
	15	William Wolford,	German,	Runner,	21	S.	....	....	Clifford,	Susquehanna,	Fatally injured by falling under a loaded car in some unknown manner while driving a team of mules on a light grade.
	31	Michael Gibus,	Lithuanian,	Laborer,	31	S.	....	....	No. 2 Forest City	Susquehanna,	Fatally injured by a fall of roof near the face of chamber. He was advised by the miner to go to the other side of the chamber, but did not do so.
June	14	Paul Mai,	Italian,	Laborer,	30	M.	1	4	Glenwood,	Lackawanna,	Fatally injured by a fall of roof while working in a cross-cut.
	21	Anthony Grobbove,	Austrian,	Miner,	28	M.	1	3	Clinton,	Lackawanna,	Fatally injured while firing a blast charged with dynamite. He was found near face where the blast was discharged. The driver said he saw him cut a short piece of fuse while preparing the charge for the blast.
	26	Stanley Melousky,	Russian,	Laborer,	18	S.	....	....	Coal Brook,	Lackawanna,	Fatally injured by a fall of roof near face of chamber while loading a car. Miner erred in not taking the coal down.

TABLE 4.—Continued

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Number of widows	Number of orphans	Name of Mine	County	Nature and Cause of Accident in Brief
July	3	John Bobbish,	Russian,	Miner,	35	M.	1	4	Coal Brook,	Lackawanna,	Fatally injured by a fall of roof while preparing to stand a prop. He discovered some props discharged after firing a blast and while replacing one of them the fall occurred.
	8	Frank Adamovitch,	Lithuanian,	Miner,	37	M	1	4	No. 2 Forest City,	Susquehanna,	Fatally injured by a fall of roof near face of chamber that he neglected to prop. He had been threatened with discharge the day before for neglect to use props.
	8	Frank Hidjinski,	Polish,	Laborer,	40	M.	1	6	No. 2 Forest City,	Susquehanna,	Fatally injured by a fall of roof near face of chamber. Neglected to prop roof.
	9	Thomas Siddons,	American,	Miner,	44	M.	1	6	Raymond,	Lackawanna,	Fatally injured by a fall of roof while visiting another chamber.
	2	Norando Romitt,	Italian,	Miner,	37	M.	1	2	Sunny Side,	Lackawanna,	Fatally injured by a fall of coal while barring out a shot at face of chamber. He died in State Hospital, Scranton, July 8.
	15	Louis Tolisco,	Italian,	Slatepicker,	16	S.	....	....	Raymond,	Lackawanna,	Fatally injured by breaker machinery. In some unknown manner he was caught in a conveyor line. Outside. Verdict of inquest accidental.
	17	Michael Ruscavage,	Polish,	Laborer,	35	S.	....	....	Raymond,	Lackawanna,	Fatally injured by a fall of roof. He was holding a prop while his miner discharged it. When the prop was removed the roof fell.
	29	Michael Ruane,	American,	Laborer,	27	S.	....	....	White Oak,	Lackawanna,	Fatally injured by a fall of roof while his miner was barring it down. The miner did not keep him back far enough.
Aug.	8	Peter Suheckie,	Polish,	Laborer,	29	M.	1	....	Powderly,	Lackawanna,	Fatally injured by being run over by a car while cleaning out the coal underneath it. A defective break allowed another car to run into the one under which he was working and he could not escape. Accident occurred at the chute. Outside.

Aug.	22	Joseph Lacovath,	Polish,	Laborer,	40	M.	1	4	Raymond,	Lackawanna,	Fatally injured by a fall of roof while cleaning a place to re-set a prop that had been discharged. The miner had neglected to examine the place.
	27	Alexander Guschefski,	Polish,	Driver,	17	S.	....	....	No. 2 Forest City,	Susquehanna,	Fatally injured by a fall of roof near a pillar where he was waiting to sprag a car. He died at Emergency Hospital, Carbondale, September 16.
Sept.	13	Laux Brienoc,	Russian,	Miner,	50	M.	1	4	Northwest,	Lackawanna,	Fatally injured by a fall of top coal while timbering an old chamber before commencing to take the top coal back.
	20	Adam Wolfe,	Polish,	Miner,	54	M.	1	....	Northwest,	Lackawanna,	Fatally injured by a fall of roof while barring out a shot at the face of chamber. The air in that section was heavily charged with carbonic acid gas through neglect of the officials. This condition was the indirect cause of the accident.
	21	Frank Shubic,	Austrian,	Miner,	62	M.	1	6	Clifford,	Susquehanna,	Fatally injured by a fall of roof ten feet back from the face of chamber. The dangerous condition was plainly evident.
Oct.	19	John Godevic,	Russian,	Laborer,	45	M.	1	....	No. 2 Forest City,	Susquehanna,	Fatally injured by a fall of roof bell shaped and hard to detect. He died at the hospital the 23d instant.
Nov.	1	John Trippe,	Italian,	Laborer,	19	S.	....	....	Erie,	Lackawanna,	He was found dead under a new fireplace in the boiler room. The verdict of an inquest held was that death was due to bad physical condition and escaping gases from the ash pit. Outside.
	7	John Kross,	Austrian,	Miner,	29	M.	1	....	Clifford,	Susquehanna,	Fatally injured by a fall of roof while barring out a shot at face of chamber.
	8	Michael Andrews,	Slavonian,	Laborer,	42	M.	1	2	No. 1 Carbondale,	Lackawanna,	While assisting the miner to lift a prop he ruptured his intestines. He died at the hospital on the operating table the following day.
	11	Anthony Haidokiawez,	Polish,	Laborer,	28	S.	....	....	Raymond,	Lackawanna,	Fatally injured by a fall of roof while shoveling coal in the car at face of workings. The miner tried to pull the rock down, but failing to do so warned Haidokiawez to keep from under it if possible.
Dec.	9	Louie Poperelli,	Italian,	Miner,	29	M.	1	2	Raymond,	Lackawanna,	Fatally injured by flying coal from a blast. He returned to the hole before giving it time to explode.
	9	John Shinges,	Russian,	Slatepicker,	15	S.	....	....	Morss Hill,	Lackawanna,	Fatally injured by being caught in an elevator line in the breaker.
	20	Michael Brown,	American,	Miner,	40	S.	....	....	Powderly,	Lackawanna,	Fatally injured by a fall of coal while barring under it.
	24	John Mashoski,	Polish,	Laborer,	25	S.	....	....	Erie,	Lackawanna,	Fatally injured by mine cars while traveling out of mine on his way home. He stepped from one track on to another in front of a trip of cars that was being pushed by a motor to the foot of shaft. He had been forbidden to do this.

TABLE 5.—Non-fatal accidents inside and outside of mines

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Name of Mine	County	Nature and Cause of Accident in Brief
Jan.	8	John Thomas, ...	Welsh, ...	Miner, ...	51	M.	Clifford, ...	Susquehanna,	Fractured ankle by fall of roof while barring out a shot.
	10	Victor Kartner, ...	Polish, ...	Miner, ...	35	M.	Black Diamond, ...	Lackawanna,.	Hands and face injured by flying coal from a blast. He failed to heed the usual warning.
	15	John Paulchuc, ...	Russian, ...	Driver, ...	18	S.	Northwest, ...	Lackawanna,.	Face injured by flying coal from a blast. The miner did not give any warning.
	19	Joseph Federcavage, ..	Polish, ...	Laborer, ...	36	M.	Raymond, ...	Lackawanna,.	Leg crushed between the bumpers of two loaded mine cars while trying to uncouple them. Outside.
Feb.	7	Joseph Extovite, ...	Polish, ...	Laborer, ...	29	M.	Northwest, ...	Lackawanna,.	Face and body injured by flying rock from a blast charged with dynamite. While assisting to tamp the charge the powder exploded.
	12	James Barnicott, ...	English,.....	Miner, ...	45	M.	No. 1 Carbondale, ..	Lackawanna,.	Face, head and hands injured by flying coal from a blast.
	13	Patrick Brennan, ...	American, ..	Laborer, ...	48	S.	Powderly, ...	Lackawanna,.	Two fingers cut off by a cross-timber falling on them.
	28	Rafel Sewage, ...	Russian, ...	Miner, ...	24	M.	Morss Hill, ...	Lackawanna,.	Collar bone fractured by flying coal from a blast.
March	11	Thomas Ford, ...	Irish, ...	Miner, ...	46	M.	White Oak, ...	Lackawanna,.	Leg fractured by a fall of roof.
	11	William Early, ...	Irish, ...	Laborer, ...	40	M.	White Oak, ...	Lackawanna,.	Leg badly bruised by a fall of roof.
	12	Joseph Higgins, ...	American, ..	Laborer, ...	38	M.	No. 1 Carbondale, ..	Lackawanna,.	Leg fractured by a mine car while lowering it a short distance into his chamber.
	14	John Baldwin, ...	English,.....	Miner, ...	47	M.	Coal Brook, ...	Lackawanna,.	Hand crushed badly by a fall of roof near face of chamber.
	22	Frank Davitt, ...	Polish, ...	Driver, ...	19	S.	Northwest, ...	Lackawanna,.	Face injured by being kicked by a mule.
	25	William Osborne, ...	American, ..	Miner, ...	34	M.	Powderly, ...	Lackawanna,.	Hip bruised by being squeezed between a mine car and the rib.
	26	James Crogan, ...	American, ..	Driver, ...	18	S.	Northwest, ...	Lackawanna,.	Foot seriously injured by being squeezed between a mine car and a head block.
May	9	John Lavandasky, ...	Polish, ...	Laborer, ...	35	M.	Northwest, ...	Lackawanna,.	Back and chest injured by fall of roof near face of chamber.

May	29	Paul Skapik,	Polish,	Slatepicker,	16	S.	Clifford,	Susquehanna,	Arm fractured by falling down the breaker steps. Outside.
	31	Michael Connor,	American,	Miner,	35	M.	Coal Brook,	Lackawanna,	Back injured by fall of roof while taking a loose piece down near face of chamber.
June	11	Charles Travis,	American,	Miner,	31	M.	No. 2 Forest City,	Susquehanna,	Hip dislocated by fall of roof while trimming the side of pillar near face of chamber.
	14	James Colicio,	Italian,	Laborer,	30	S.	Glenwood,	Lackawanna,	Head and body injured by fall of roof in a cross-cut while shoveling coal.
	14	Thomas Rielly,	Irish,	Miner,	60	M.	Glenwood,	Lackawanna,	Leg fractured by fall of roof in a cross-cut back thirty feet from the face.
	15	Angelo Angeline,	Italian,	Miner,	24	M.	White Oak,	Lackawanna,	Leg injured by fall of roof near face after returning from firing a blast.
July	10	Anthony Leich,	Russian,	Laborer,	20	S.	No. 1, Carbondale,	Lackawanna,	Leg fractured by fall of bony from the rib back ten feet from the face.
	11	Michael Schultz,	Polish,	Miner,	54	M.	No. 2 Forest City,	Susquehanna,	Ribs fractured and injured internally by a fall of roof near face of chamber.
	13	Frank Pullman,	Italian,	Laborer,	45	M.	White Oak,	Lackawanna,	Head and body seriously injured by fall of roof while shoveling coal from a cross-cut near the face.
	17	Patrick Gilhool,	American,	Miner,	40	M.	Raymond,	Lackawanna,	Head and body seriously injured by fall of roof. He discharged a prop by knocking it with a hammer when the roof fell. Near the face.
	19	John Rielly,	Irish,	Miner,	65	M.	White Oak,	Lackawanna,	Leg fractured and collar bone broken by fall of coal. He was robbing pillars, and while drilling a hole a piece that was projecting fell on him.
	19	Motile Pearre,	Italian,	Car loader,	34	M.	Coal Brook,	Lackawanna,	Collar bone broken by being caught between two railroad cars. Outside.
Aug.	17	Joseph Caraccibo.	Italian,	Miner,	44	M.	White Oak,	Lackawanna,	Body bruised by fall of roof while replacing props near the face of chamber.
	26	Frank Fadgio,	Italian,	Driver,	17	S.	Coal Brook,	Lackawanna,	Leg bruised by a culm car. He fell in front of car and was caught. Outside.
	30	John Krochta,	Austrian,	Miner,	37	M.	Glenwood,	Lackawanna,	Fractured ankle and body bruised by fall of roof near face.
Sept.	17	John Rosofsky,	Polish,	Laborer,	35	M.	Black Diamond,	Lackawanna,	Leg fractured by a fall of roof while loading a car on the heading road. They were opening a chamber.
Oct.	5	Frank Koloskie,	Polish,	Laborer,	29	S.	No. 1 Carbondale,	Lackawanna,	Fractured ankle by a mine car. He was driving, and while walking along the side of car he slipped under it.
	7	Frank Berish,	Slavonian,	Driver,	18	S.	No. 2 Forest City,	Susquehanna,	Compound fracture of leg. While spragging a car it bumped against a head block and caught him.
	8	Peter Sobaleski,	Polish,	Miner,	32	M.	No. 2 Forest City,	Susquehanna,	Compound fracture of leg by fall of roof while trying to pull it down near the face.
	9	Joseph Sescoe,	Polish,	Driver,	25	S.	Northwest,	Lackawanna,	Kicked on the head by a mule he was driving.
	19	Peter Michelchuck,	Russian,	Miner,	48	M.	Northwest,	Lackawanna,	Burned seriously about the face and hands while firing a blast charged with dynamite. He returned to the hole after lighting the fuse with the above result.

TABLE 5.—Continued

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Name of Mine	County	Nature and Cause of Accident in Brief
Nov.	4	Dominick Cartoso,	Italian,	Driver,	19	S.	White Oak,	Lackawanna,	Bruised about the hips by being squeezed between a mine car and a prop.
	5	Peter Mulinaro,	Italian,	Loco. brakeman,	19	S.	Coal Brook,	Lackawanna,	Leg fractured by falling off moving cars while walking along the top of them. Outside.
	12	Joseph Buchar,	Austrian,	Miner,	32	M.	Clinton,	Lackawanna,	Face and hands seriously burned by an explosion of powder that he was preparing. A spark from his lamp fell in the powder.
	12	Michael Vewski,	Austrian,	Laborer,	28	S.	Clinton,	Lackawanna,	Body crushed seriously while trying to unhitch a mule from a car of rock. He fell across the rail. Outside.
	18	Peter Flanigan,	American,	Runner,	19	S.	No. 1 Carbondale,	Lackawanna,	Jaw fractured by being struck with a lever while assisting to replace a car.
	18	George Corvona,	Polish,	Miner,	30	S.	Northwest,	Lackawanna,	Leg fractured by fall of roof while barring out a shot at the face.
	19	Anthony Sweeney,	American,	Driver,	22	M.	Sunnyside,	Lackawanna,	Collar bone fractured by being thrown against a pillar by a mule.
	20	James Gounk,	Russian,	Laborer,	35	M.	Jermyn,	Lackawanna,	Two ribs and ankle fractured by a fall of roof near face of chamber while loading a car.
Dec.	7	John Novak,	Austrian,	Laborer,	38	M.	Clinton,	Lackawanna,	Hand badly lacerated by a fall of roof while making a cap piece for a prop back ten feet from the face.
	7	Joseph Rosemeslovitch,	Polish,	Laborer,	21	S.	No. 2 Forest City,	Susquehanna,	Thigh fractured while holding a tie against a loaded car and a motor. The tie slipped and fell on him.
	9	Frank Supancik,	Austrian,	Miner,	26	M.	Clinton,	Lackawanna,	Left hand and both feet badly bruised by fall of roof while barring out a shot.
	13	John McAndrew,	Irish,	Laborer,	43	M.	Clinton,	Lackawanna,	Left leg severely bruised by a runaway car near foot of slope.
	14	Stephen Koskaski,	Polish,	Laborer,	26	S.	Jermyn,	Lackawanna,	Face and hands burned by powder. A spark from the miner's lamp fell into a cartridge of powder while preparing to charge a hole.
	13	Ambrose Maren,	American,	Slatepicker,	16	M.	White Oak,	Lackawanna,	Hand badly injured by a mine car while taking a block from under it. Outside.

CONDITION OF COLLIERIES

DELAWARE AND HUDSON COMPANY

Clinton Colliery.—Ventilation, drainage and condition as to safety good.

Coal Brook Colliery.—Ventilation, drainage and condition as to safety good.

No. 1 Carbondale Colliery.—Ventilation, drainage and general condition good.

Powderly Colliery.—Ventilation, drainage and general condition good.

White Oak Colliery.—Ventilation, drainage and general condition good.

Jermyn Colliery.—Ventilation fair, drainage and general condition good.

HILLSIDE COAL AND IRON COMPANY

Clifford Colliery.—Ventilation and drainage fair, condition as to safety good.

Forest City Colliery.—Ventilation fair, drainage good, condition as to safety fair.

Erie Colliery.—Ventilation, drainage and condition as to safety fair.

Glenwood Colliery.—Ventilation fair, drainage bad, condition as to safety fair.

Keystone Colliery.—Ventilation good, drainage fair, condition as to safety fair.

SCRANTON COAL COMPANY

Back Diamond Colliery.—Ventilation good, except in a few places, drainage fair, condition as to safety fair.

Riverside Colliery.—Ventilation, drainage and condition as to safety fair.

Raymond Colliery.—Ventilation fair, drainage good, condition as to safety fair.

TEMPLE IRON COMPANY

Northwest Colliery.—Ventilation very bad, but it has been much improved, drainage bad, condition as to safety bad.

HUMBERT COAL COMPANY

Sunnyside Colliery.—Ventilation and drainage bad, condition as to safety fair.

NORTHEAST COAL COMPANY

Northeast Colliery.—Ventilation fair, drainage good, condition as to safety fair.

MORSS HILL COAL COMPANY

Morss Hill Colliery.—Ventilation, drainage and condition as to safety fair.

CARBONDALE COAL COMPANY

Bolands Colliery.—Ventilation, drainage and condition as to safety fair.

BARTON COAL COMPANY

Barton Colliery.—Ventilation, drainage and condition as to safety fair.

CLINTON FALLS COAL COMPANY

Clinton Falls Colliery.—Ventilation good, drainage fair, condition as to safety fair.

FINN COAL COMPANY

Finn Colliery.—Ventilation, drainage and condition as to safety fair.

ARCHBALD COAL COMPANY

Tappans Colliery.—Ventilation and general condition good.

IMPROVEMENTS

DELAWARE AND HUDSON COMPANY

Clinton Colliery.—Plane in Clifford vein extended 2,300 feet cutting off 1,800 feet of rope haulage. Steam plane in Clifford vein driven 2,400 feet, dispensing with mule haulage, operated with a Flory engine, 12¼ by 16 inch cylinders. A new Guibal fan, 20 feet in diameter, driven by a Dickson engine 16 by 36 inch cylinder, has been installed to ventilate No. 8 slope, Clifford vein, in place of Riverside slope fan. In the Bottom vein a water course is being driven a distance of 3,800 feet to drain the Clinton mine through Coal Brook. 3,300 feet of this water course has been completed. When finished the pumping plant now in use in Clinton will be abandoned. An eight inch bore hole driven from the surface to the Clifford vein a distance of 259 feet for conveyance of steam for plane and pumps. One 12 inch bore hole from surface to Clifford vein a distance of 195 feet for pumping water.

Coal Brook Colliery.—One 6 ton electric motor with drum attached, for hoisting and lowering cars in chambers, has been installed. One 12-foot Guibal fan, driven by electric power, to ventilate the New County vein has been installed. A large sump has been made at the foot of Stanton shaft for electric and steam pumping plant. A new outside culm plane of wooden structure has been erected 1,800 feet in length. One 8-inch and one 6-inch bore hole driven from surface to bottom vein for conveyance of air to operate slope. Depth of bore hole 230 feet.

No. 1 Carbondale Colliery.—No. 5 Tunnel driven from surface to Archbald vein, distance 400 feet. No. 4 Tunnel driven from surface to Archbald vein, distance 250 feet. Tail rope haulage road driven and graded from No. 1 Tunnel to No. 4, a distance of 3,050 feet. A new engine house built, and a 14 by 20 inch cylinder engine of the Flory type installed to operate the haulage.

Jermyn Colliery.—Plane in Grassy vein driven 800 feet. Plane in Archbald vein extended 600 feet. Rope haulage in Archbald vein extended 2,200 feet. A 17 foot Guibal fan has been built to ventilate the Grassy vein. A Dickson engine, 16 by 30 inch cylinder, operates the fan. An 8-inch bore hole driven 147 feet from the surface to the Archbald vein to convey steam to operate fan on the surface.

White Oak Colliery.—Tail rope haulage in Dunmore vein straightened and graded for a distance of 1,600 feet. No. 2 slope Dunmore vein extended 400 feet. Tunnel in Dunmore vein driven through fault 150 feet. No. 6 Tunnel re-opened, and 2,200 feet of tracks laid to operate it. No. 8 Tunnel to Dunmore vein re-opened and tracks laid preparatory to robbing.

HILLSIDE COAL AND IRON COMPANY

Erie Colliery.—A two-story building of reinforced concrete 29 x 74 feet was erected for storehouse purposes. Three tubular boilers were installed equal to 300 horse power, or 1,200 in the aggregate. One 7½ ton electric motor. West side steam plane extended 400 feet. East side plane extended 1,400 feet. One 6-inch bore hole from surface to the Grassy vein for slushing purposes to recover pillars.

SCRANTON COAL COMPANY

Raymond Colliery.—The Raymond shaft has been sunk from the Clark to the Dunmore vein, a distance of 86 feet, cutting a four foot vein of excellent coal. The second opening has also been sunk from and to the same vein.

TEMPLE IRON COMPANY

Northwest Colliery.—An air shaft was sunk to Mills vein, a distance of 32 feet. A Guibal fan was erected on this shaft 20 feet in diameter for ventilation. It is driven by an electric motor. A 75 K. W. generator driven direct by a Taylor-Chandler engine was installed to generate current to supply the motor.

HUMBERT COAL COMPANY

Sunnyside Colliery.—A new vein of coal has been opened near top of mountain about 2,000 feet from the breaker. A new mule barn and a fireproof stone powder house were erected. Additional railroad tracks have been laid in order to meet the increased capacity of the colliery.

MORSS HILL COAL COMPANY

Morss Hill Colliery.—A slope was sunk from the surface to top vein, a distance of 125 feet, the average pitch twenty degrees and a steam hoist was installed. Water way was driven to Third vein. The breaker and trestle thoroughly repaired and new breaker engine, jigs, screen, etc., installed. A 65 K. W. generator, electric hoist, two motors for shop purposes and a complete system of electric lighting for breaker and offices were installed.

ARCHBALD COAL COMPANY

Tappans Colliery.—A new breaker was built and equipped with all the latest improved machinery for preparing coal. A new boiler house, supply house, blacksmith shop, and barn were erected. This is a new colliery that commenced operations the latter part of November.

Second District

LACKAWANNA COUNTY

Scranton, Pa., March 3, 1908.

Hon. James E. Roderick, Chief of Department of Mines:

Sir: I have the honor to transmit herewith my annual report of the Second Anthracite Inspection District, for the year ending December 31, 1907.

Respectfully submitted,

L. M. EVANS, Inspector.

SUMMARY OF STATISTICS

Number of collieries,	15
Number of mines,	34
Number of mines in operation,	32
Number of tons of coal shipped to market,	4,091,339
Number of tons used at mines for steam and heat,	402,530
Number of tons sold to local trade and used by employes,	47,019
Number of tons produced	4,540,888
Number of tons produced by compressed air machines,	—
Number of tons produced by electrical machines,	—
Number of persons employed inside of mines,	7,900
Number of persons employed outside,	2,486
Number of fatal accidents inside of mines,	49
Number of fatal accidents outside,	2
Number of non-fatal accidents inside of mines,	52
Number of non-fatal accidents outside,	10
Number of tons of coal produced per fatal accident inside,	92,671
Number of persons employed per fatal accident inside,	161
Number of persons employed per fatal accident outside,	1,243
Number of persons employed per non-fatal accident inside,	151
Number of persons employed per non-fatal accident outside,	248
Number of wives made widows,	31
Number of children orphaned,	61
Number of steam locomotives used inside of mines,	4
Number of steam locomotives used outside,	33
Number of compressed air locomotives used inside,	9
Number of electric motors used inside,	29
Number of fans in use,	30
Number of gaseous mines in operation,	15
Number of non-gaseous mines in operation,	17

TABLE A

PRODUCTION OF COAL

Names of Operators	Tons
Scranton Coal Company,	1,020,125
Delaware and Hudson Company,	820,855
Delaware, Lackawanna and Western Railroad Company,	776,564
Pennsylvania Coal Company,	632,626
Sterrick Creek Coal Company,	592,799
Lackawanna Coal Company,	310,920
Dolph Coal Company,	274,217
Mount Jessup Coal Company,	59,299
Moosic Mountain Coal Company,	41,412
Blakely Coal Company,	8,664
Mott Haven Coal Company,	3,407
Total,	4,540,888

Production by Counties

Lackawanna,	4,540,888

TABLE B.—Fatal and non-fatal accidents inside and outside of mines; number of tons of coal produced per accident; number of persons employed; number employed per accident

Names of Operators	Fatal Accidents			Non-fatal Accidents			Tons of coal produced per fatal accident inside	Tons of coal produced per non-fatal accident inside	Number of employes inside	Number of employes outside	Total number of employes	Number of employes inside per fatal accident	Number of employes outside per fatal accident	Number of employes inside per non-fatal accident	Number of employes outside per non-fatal accident
	Inside	Outside	Total	Inside	Outside	Total									
Scranton Coal Co.,	22	1	23	18	2	20	46,369	56,673	2,032	757	2,790	92	757	112	378
Delaware and Hudson Co.,	5	....	5	7	1	8	164,171	117,265	1,322	466	1,788	264	....	188	466
Delaware, Lackawanna and Western Railroad Co.,	8	....	8	13	1	14	97.070	59,735	1,240	242	1,482	155	....	95	242
Pennsylvania Coal Co.,	3	....	3	2	....	2	210,875	316,313	1,109	177	1,285	369	....	554	....
Sterrick Creek Coal Co.,	3	....	3	3	2	5	197,599	197,599	716	218	934	238	....	238	109
Lackawanna Coal Co.,	6	....	6	5	3	8	51,820	62,184	586	196	782	97	....	117	65
Dolph Coal Co.,	1	1	2	3	1	4	274.217	91,405	344	215	559	344	215	114	215
Mount Jessup Coal Co.,	1	....	1	1	....	1	59,299	59,299	269	151	420	269	....	269	....
Miscellaneous companies,	....	....	....	....	....	....	.....	....	282	64	346	....	....	....	....
Totals and averages for district,	49	2	51	52	10	62	92,671	87,324	7,900	2,486	10,386	161	1,243	151	248

TABLE C.—Classification of Fatal Accidents Inside and Outside of Mines

	Months													
	January	February	March	April	May	June	July	August	September	October	November	December	Totals	Percentages
Causes of Accidents Inside														
Falls of coal,	....	....	....	....	1	1	....	....	....	....	....	....	2	4.08
Falls of roof,	1	1	....	5	1	2	1	1	1	....	1	2	16	32.65
Mine cars,	1	....	....	....	....	....	1	....	1	1	2	....	6	12.25
Explosions of gas and dust,	....	....	....	....	....	7	....	1	1	....	....	....	9	18.37
Explosions of powder and dynamite,	....	....	....	....	....	....	....	....	1	....	....	....	1	2.04
Premature blasts,	....	1	1	1	1	1	3	....	....	1	2	....	11	22.45
Falling into shafts,	1	....	....	....	....	....	....	1	....	....	....	....	2	4.08
By mules,	....	....	....	....	....	....	....	....	1	....	....	....	1	2.04
Miscellaneous,	....	....	....	....	....	....	....	1	....	....	....	....	1	2.04
Totals,	3	2	1	6	3	11	5	4	5	2	5	2	49	100.00
Causes of Accidents Outside														
Cars,	....	....	....	....	....	....	....	....	1	....	....	....	1	50.00
Machinery,	....	....	....	....	....	....	....	....	....	....	1	....	1	50.00
Totals,	....	....	....	....	....	....	....	....	1	....	1	....	2	100.00
Grand totals inside and outside,	3	2	1	6	3	11	5	4	6	2	6	2	51	....

TABLE D.—Classification of Non-fatal Accidents Inside and Outside of Mines

	Months													
	January	February	March	April	May	June	July	August	September	October	November	December	Totals	Percentages
Causes of Accidents Inside														
Falls of roof,	2	1	....	....	1	1	2	2	2	1	3	1	16	30.77
Mine cars,	2	1	....	3	1	1	3	....	2	....	2	1	16	30.77
Explosions of gas and dust,	....	1	....	....	....	2	....	....	1	1	....	...	5	9.61
Explosions of powder and dynamite,	....	....	....	....	....	....	....	1	....	....	....	...	1	1.92
Premature blasts,	....	2	....	....	1	....	....	....	....	2	....	1	6	11.54
By mules,	....	....	....	....	....	....	1	....	....	....	....	1	2	3.85
Miscellaneous,	....	....	....	2	....	1	1	....	2	....	....	....	6	11.54
Totals,	4	5	....	5	3	5	7	3	7	4	5	4	52	100.00
Causes of Accidents Outside														
Cars,	....	1	1	....	....	1	....	....	1	1	....	2	7	70.00
Machinery,	1	....	....	....	....	....	....	....	....	1	....	....	2	20.00
Miscellaneous,	....	1	....	....	....	....	....	....	....	....	....	....	1	10.00
Totals,	1	2	1	....	....	1	....	....	1	2	....	2	10	100.00
Grand totals inside and outside,	5	7	1	5	3	6	7	3	8	6	5	6	62	....

TABLE E.—Occupations of Persons Killed or Fatally Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Inside													
Miners,	....	2	1	4	1	6	2	2	2	1	2	1	24
Miners' laborers,	....	...	...	2	2	5	2	1	1	...	1	....	14
Drivers and runners,	2	....	....	....	....	....	....	....	1	1	....	1	5
Doorboys and helpers,	....	....	....	....	....	....	....	....	1	....	....	....	1
All other employes,	1	....	....	....	....	....	1	1	....	....	2	....	5
Totals,	3	2	1	6	3	11	5	4	5	2	5	2	49
Outside													
Slatepickers (boys),	....	....	....	....	....	....	....	....	....	....	1	....	1
All other employes,	....	....	....	....	....	....	....	....	1	....	....	....	1
Totals,	....	....	....	....	....	....	....	....	1	....	1	....	2
Grand totals inside and outside, ...	3	2	1	6	3	11	5	4	6	2	6	2	51

TABLE F.—Occupations of Persons Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Inside													
Miners,	....	3	....	....	2	1	3	3	1	3	1	3	20
Miners' laborers,	2	....	....	....	....	2	2	....	1	1	2	....	10
Drivers and runners,	....	2	....	4	1	....	2	....	2	....	2	1	14
Company men,	....	....	....	....	....	....	....	....	1	....	....	....	1
All other employes,	2	...	....	1	...	2	....	....	2	....	....	....	7
Totals,	4	5	....	5	3	5	7	3	7	4	5	4	52
Outside													
Blacksmiths and carpenters,	....	1	....	....	....	....	....	...	1	....	....	....	2
Engineers and firemen,	....	....	....	....	....	....	....	....	....	1	....	....	1
Slatepickers (boys),	1	....	....	....	....	....	....	....	....	....	....	....	1
All other employes,	....	1	1	....	....	1	....	....	....	1	....	2	6
Totals,	1	2	1	....	....	1	....	....	1	2	....	2	10
Grand totals inside and outside, ...	5	7	1	5	3	6	7	3	8	6	5	6	62

TABLE G.—Nationality of Persons Killed or Fatally Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
American,	1	....	....	....	....	....	1	....	....	....	....	1	3
English,	....	....	....	....	....	1	....	....	....	....	....	....	1
Welsh,	....	1	....	1	....	....	....	....	....	....	2	....	4
Irish,	1	....	....	1	....	....	1	1	1	....	....	....	5
German,	....	....	....	....	....	....	....	....	1	....	1	....	2
Polish,	....	1	....	3	1	4	3	....	2	....	1	....	15
Italian,	....	....	....	....	2	....	....	1	2	....	....	....	5
Slavonian,	....	....	....	1	....	....	....	2	....	1	1	....	5
Lithuanian,	....	....	....	....	....	5	....	....	....	....	....	1	6
Austrian,	1	....	....	....	....	....	....	....	....	1	1	....	3
Russian,	....	....	1	....	....	1	....	....	....	....	....	....	2
Totals,	3	2	1	6	3	11	5	4	6	2	6	2	51

TABLE H.—Nationality of Persons Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
American,	1	2	....	2	....	2	1	....	3	2	2	....	15
English,	....	1	....	....	....	....	1	....	....	....	....	1	3
Welsh,	....	....	....	....	....	....	....	....	....	....	1	1	2
Irish,	....	....	....	....	....	....	1	1	....	....	....	....	2
German,	....	....	....	....	....	....	1	....	....	....	....	....	1
Polish,	2	2	1	1	3	1	1	....	4	3	2	1	21
Italian,	2	....	....	....	....	....	2	1	....	....	....	....	5
Slavonian,	....	1	....	1	....	....	....	....	1	....	....	1	4
Lithuanian,	....	....	....	....	....	1	....	....	....	....	....	1	2
Austrian,	...	...	...	1	...	...	...	....	....	....	....	1	2
Russian,	....	1	....	....	....	1	....	1	....	1	....	....	4
Greek,	....	....	....	....	....	1	....	....	....	....	....	....	1
Totals,	5	7	1	5	3	6	7	3	8	6	5	6	62

TABLE I.—Operators and mines, kind of openings, type and size of fans, size of furnaces, volume of air produced by fan or furnace per minute, number of splits of air currents, and number of persons employed inside

Names of Operators and Mines	Kind of opening	Gaseous or non-gaseous	Method of ventilation	Diameter of fan in feet	Width of blades in feet	Depth of blades in feet	Number of revolutions per minute	Water gauge developed—in inches	Name of fan	Power used	Number of splits of air currents	Number of cubic feet of air per minute entering the mine at inlet	Total quantity of air per minute circulating in all the splits in cubic feet	Number of persons employed inside
Scranton Coal Co.														
Johnson Colliery:														
Johnson No. 1,	Shaft,	Gaseous,	Fan,	30	10.00	8.00	55	2.00	Guibal,	Steam,	8	210,265	146,130	271
Johnson No. 2,	Shaft,	Gaseous,	Fan,	18	5.00	6.00	110	1.80			5	136,400	120,325	262
Ontario Colliery:														
Sturgess,	Shaft,	Non-gas.,	Fan,	20	6.00	6.25	65	1.20			4	65,680	60,685	232
Tunnel,	Tunnel,	Gaseous,	Fan,	14	4.25	3.50	90	1.00			2	51,890	46,000	88
Klondyke,	Tunnel,	Non-gas.,	Fan,	12	3.25	3.60	110	1.00			3	99,200	88,360	156
Blue Ridge,	Tunnel,	Non-gas.,	Natural,	....	....	....	....	....	....	....	1	16,000	12,000	45
Blue Ridge,	Shaft,	Non-gas.,	Fan,	15	4.50	4.00	75	.50	Guibal,	Steam,	2	33,000	21,700	75
Richmond No. 3,	Shaft,	Gaseous,	Fan,	30	10.00	10.00	45	1.30	Guibal,	Steam,	4	147,000	111,000	210
Delaware, Lackawanna and Western Railroad Co.														
Storrs Colliery:														
Storrs No. 1,	Shaft,	Gaseous,	Fan,	14	4.00	3.25	90	1.10	Guibal,	Steam,	9	156,340	138,015	331
Storrs No. 2,	Shaft,		Fan,	16	6.00	4.00	119	1.50			8	168,259	148,076	374
Storrs No. 3,	Shaft,		Fan,	24	8.00	7.30	65	1.30			8	99,091	84,036	214
Delaware and Hudson Co.														
Eddy Creek Colliery:														
Eddy Creek,	Shaft,	Gaseous,	Fan,	*	....	....	....	....						
Miles,	Slope,	Gaseous,	Fan,	*	....	....	....	....						
No. 4,	Drift,	Non-gas.,	Fan,	8	3.00	2.50	125	2.00		Steam,	2	35,370	32,115	85
C. V. Birds Eye,	Drift,	Non-gas.,	Fan,	10	3.50	2.00	200	1.00		Electricity,	2	41,190	34,860	48
N. C. V. Birds Eye,	Drift,	Non-gas.,	Fan,	8	3.00	2.00	200	2.00		Electricity,	2	46,280	38,500	68

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*Idle.

Olyphant Colliery:													
Olyphant No. 2,	Shaft,	Gaseous,	Fan,	22	5.00	5.50	90	2.20	Guibal,	Steam,	8	191,887	145,275	316
Grassy Island,	Shaft,	Gaseous,	Fan,	20	5.00	4.00	70	1.50		Steam,	5	102,300	84,900	107
Grassy Island,	Slope,	Gaseous,	Fan,	28	7.00	8.00	60	2.00		Steam,	7	94,500	85,000	215
Grassy Island,	Drift,*	Non-gas.,	Natural,											
Pennsylvania Coal Co.														
No. 1 Colliery:														
No. 1,	Shaft,	Gaseous,	Fan,	17.50	5.00	4.50	70	.60	Guibal,	Steam,	8	101,300	89,500	262
No. 2,	Drift,	Non-gas.,	Fan,	17.50	5.00	4.50	60	.60			5	67,085	59,555	192
Gipsy Grove,	Shaft,	Non-gas.,	Fan,	17.50	5.00	4.50	72	.90			6	100,600	97,000	234
Sterrick Creek Coal Co.														
Sterrick Creek Colliery:														
Sterrick Creek,	Shaft,	Gaseous,	Fan,	25	5.00	5.50	65	2.00	Guibal,	Steam,	5	98,100	84,000	200
Sterrick Creek,	Drift,	Non-gas.,	Fan,	16	4.50	4.50	70	.80	Guibal,	Steam,	6	98,745	75,715	215
Lackawanna Coal Co.														
Lackawanna Colliery:														
Lackawanna No. 1,	Shaft,	Gaseous,	Fan,	20.00	5.00	4.00	75	2.00	Guibal,	Steam,	7	145,450	118,125	328
Lackawanna No. 4,	Shaft,	Gaseous,	Fan,†	30.00	10.00	8.00								
Dolph Coal Co.														
Dolph Colliery:														
Dolph, Hackley,	Slope,	Non-gas.,	Fan,	20.00	6.00	6.00	60	1.00	Guibal,	Steam,	2	60,290	38,280	108
Dolph, Clark Vein,	Drift,	Non-gas.,	Fan,	20.00	6.00	6.00	30	1.00			2	61,170	38,250	36
Dolph, Hannah Bell,	Slope,	Non-gas.,	Fan,	20.00	5.00	4.00	60	1.00			3	61,665	39,370	104
Mount Jessup Coal Co.														
Mount Jessup, Peck's,	Shaft,	Gaseous,	Fan,	16.00	6.00	4.50	85	.90	Guibal,	Steam,	4	36,700	32,200	86
Moosic Mountain Coal Co.														
Marshwood,	Drift,	Non-gas.,	Fan,	12.00	4.00	4.50	75	1.00	Guibal,	Steam,	4	79,200	51,600	158
Mott Haven Coal Co.														
Mott,	Slope,*	Non-gas.,	Natural,											
Blakely Coal Co.														
Blakely,	Slope,*	Non-gas.,	Natural,											

*Robbing pillars.
†Not yet in operation.

TABLE 1.—Operators, location of collieries, railroads, etc.

Names of Operators and Collieries	County	Name of General Superintendent	Post Office	Name of Superintendent	Post Office	Railroad to Mine
Scranton Coal Co.						
Johnson, Ontario, Richmond No. 3,	Lackawanna,	William L. Allen,	Peckville,	John J. Aitken,	Priceburg,	Ontario and Western
Delaware and Hudson Co.						
Olyphant, Eddy Creek, Grassy Island Washery,	Lackawanna,	C. C. Rose,	Scranton,	E. R. Pettebone,	Dorranceton,	Delaware and Hudson
Delaware, Lackawanna and Western Railroad Co.						
Storrs,	Lackawanna,	R. A. Phillips,	Scranton,	Walter Reese,	Scranton,	D. L. and W.
Pennsylvania Coal Co.						
No. 1 Colliery, Gipsy Grove,	Lackawanna,	William W. Inglis,	Dunmore,	David Girvan,	Dunmore,	Erie
Sterrick Creek Coal Co.						
Sterrick Creek,	Lackawanna,	F. H. Hemelright,	Scranton,	Joseph Reese,	Olyphant,	D. L. and W.
Lackawanna Coal Co.						
Lackawanna,	Lackawanna,	F. H. Hemelright,	Scranton,	Joseph Reese,	Olyphant,	Erie
Dolph Coal Co.						
Dolph,	Lackawanna,	W. G. Robertson,	Jessup,			Erie
Mount Jessup Coal Co.						
Mount Jessup,	Lackawanna,			John T. Cartwright.	Winton,	D. L. and W.
Moosic Mountain Coal Co.						
Marshwood,	Lackawanna,	Charles P. Ford,	Marshwood,			Erie
Blakely Coal Co.						
Blakely,	Lackawanna,	B. E. Kingsley,	Olyphant.			*
Mott Haven Coal Co.						
Mott Haven,	Lackawanna,	Thomas H. Hull,	Scranton,	James W. Nichols,	Blakely.	*

*Hauled in wagons to railroad.

TABLE 2.—Number of tons of coal mined, number of days worked, number of persons employed, number killed and injured, quantity of powder and dynamite used, etc.

Names of Operators and Collieries	County	Number of tons of coal shipped to market	Number of tons used at collieries for steam and heat	Number of tons sold to local trade and used by employes	Total production of coal in tons	Number of days worked	Number of employes	Number of fatal accidents	Number of non-fatal accidents	Number of kegs of powder used	Number of pounds of dynamite used	Number of horses and mules
Scranton Coal Co.												
Johnson,	Lackawanna,	457,622	46,525	3,945	508,092	249	1,243	13	10	18,497	53,200	115
Ontario,		274,001	30,000	1,523	305,524	207	1,066	5	4	12,553	101,400	101
Richmond No. 3,		182,503	20,000	4,006	206,509	242	480	5	6	7,700	5,400	48
Totals,		914,126	96,525	9,474	1,020,125	......	2,789	23	20	38,750	160,000	264
Delaware and Hudson Co.												
Olyphant,	Lackawanna,	333,490	8,837	....	342,327	177	1,174	1	4	11,950	9,162	89
Eddy Creek,		316,263	10,271	5,695	332,229	247	565	4	4	18,805	18,407	35
		649,753	19,108	5,695	674,556	......	1,739	5	8	30,755	27,569	124
Grassy Island Washery,	Lackawanna,	71,118	75,181	....	146,299	......	49	....	....	....	....	......
Totals,		720,871	94,289	5,695	820,855	......	1,788	5	8	30,755	27,569	124
Delaware, Lackawanna and Western Railroad Co.												
Storrs,	Lackawanna,	704,476	66,881	5,207	776,564	247	1,482	8	14	33,310	27,163	75
Pennsylvania Coal Co.												
No. 1 Colliery,	Lackawanna,	449,970	13,486	2,404	465,860	258	969	3	2	20,656	25,450	75
Gipsy Grove,		161,766	5,000	....	166,766	251	317	....	....	6,942	1,694	36
Totals,		611,736	18,486	2,404	632,626	......	1,286	3	2	27,598	27,144	111
Sterrick Creek Coal Co.												
Sterrick Creek,	Lackawanna,	538,599	43,911	10,289	592,799	274	934	3	5	21,264	38,991	100

TABLE 2.—Continued

Names of Operators and Collieries	County	Number of tons of coal shipped to market	Number of tons used at collieries for steam and heat	Number of tons sold to local trade and used by employes	Total production of coal in tons	Number of days worked	Number of employes	Number of fatal accidents	Number of non-fatal accidents	Number of kegs of powder used	Number of pounds of dynamite used	Number of horses and mules
Lackawanna Coal Co. Lackawanna,	Lackawanna,	270,248	33,313	7,359	310,920	260	782	6	8	12,579	74,059	72
Dolph Coal Co. Dolph,	Lackawanna,	248,024	25,000	1,193	274,217	207	559	2	4	1,125	8,800	57
Mount Jessup Coal Co. Mount Jessup,	Lackawanna,	42,608	15,650	1,041	59,299	87	420	1	1	1,745	4,631	40
Moosic Mountain Coal Co. Marshwood,	Lackawanna,	32,768	7,825	819	49,412	75	285	....	....	1,600	1,425	46
Blakely Coal Co. Blakely,	Lackawanna,	5,212	350	3,102	8,664	227	27	....	....	300	400	3
Mott Haven Coal Co. Mott Haven,	Lackawanna,	2,671	300	436	3,407	110	34	....	....	175	50	1
Grand totals,	....	4,091,339	402,530	47,019	4,540,888	......	10,386	51	62	169,201	370,232	893

TABLE 2.—Part 2

Names of Operators	County	Number of Boilers					Locomotives			Number of steam engines of all classes	Total horse power	Number of pumps delivering water to surface	Capacity in gallons per minute	Quantity delivered to surface per minute—gallons	Number of electric dynamos	Number of air compressors
		Cylindrical	Horse power	Tubular	Horse power	Total horse power	Steam	Air	Electric							
Scranton Coal Co.,	Lackawanna,	25	655	27	3,270	3,925	8	......	5	66	4,681	14	8,860	7,030	5	1
Delaware and Hudson Co.,		36	1,014	18	3,850	4,864	7	9	......	82	4,734	8	10,300	5,900	1	2
Delaware, Lackawanna and Western Railroad Co.,		......	....	13	2,625	2,625	4	......	16	20	2,510	2	2,160	1,150	5	......
Pennsylvania Coal Co.,		......	....	12	1,600	1,600	3	......	......	25	1,485	1	1,000	400	1	3
Sterrick Creek Coal Co.,		......	....	8	1,800	1,800	7	......	......	17	2,100	4	2,764	2,100	1	2
Lackawanna Coal Co.,		......	....	8	2,060	2,060	2	......	5	18	2,300	9	10,500	4,600	2	......
Dolph Coal Co.,		......	....	10	1,845	1,845	3	......	3	28	1,247	6	1,569	300	3	3
Mount Jessup Coal Co.,		......	....	14	1,050	1,050	2	......	......	12	605	4	3,300	1,600	......	......
Moosic Mountain Coal Co.,		......	....	13	340	340	1	......	......	4	105	2	800	450	1	......
Blakely Coal Co.,		3	240	3	135	375	......	......	......	1	200	....	....	....	......	......
Mott Haven Coal Co.,		......	....	1	80	80	......	......	......	1	125	1	40	30	......	......
Totals,	....	64	1,909	127	18,655	20,564	37	9	29	274	20,092	51	41,293	23,560	19	11

Table 3.—Number of each class of employes inside and outside of mines

Names of Operators and Collieries	County	Inside											Outside									Grand total inside and outside
		Mine foremen	Assistant mine foremen	Fire bosses and assistants	Miners	Miners' laborers	Drivers and runners	Doorboys and helpers	Pumpmen	Company men	All other employes	Total inside	Superintendents	Foremen	Blacksmiths and carpenters	Engineers and firemen	Slate pickers (boys)	Slate pickers (men)	Bookkeepers and clerks	All other employes	Total outside	
Scranton Coal Co.																						
Johnson,	Lackawanna,	2	3	6	308	290	124	68	15	......	137	953	1	1	18	40	31	47	2	150	290	1,243
Ontario,		2	5	...	330	170	101	11	8	......	92	719	1	2	16	30	66	90	2	140	347	1,066
Richmond No. 3,		1	....	3	315	100	79	14	3	......	45	360	1	1	9	19	17	25	2	46	120	480
Totals,		5	8	9	753	560	304	93	26	......	274	2,032	3	4	43	89	114	162	6	336	757	2,789
Delaware and Hudson Co.																						
Olyphant,	Lackawanna,	3	2	5	335	396	35	5	4	86	2	873	....	2	8	47	14	46	2	182	301	1,174
Eddy Creek,		1	3	4	117	140	99	13	4	57	11	449	....	1	8	3	5	42	3	54	116	565
		4	5	9	452	536	134	18	8	143	13	1,322	....	3	16	50	19	88	5	236	417	1,739
Grassy Island Washery,	Lackawanna,	....	....	....	.....	......	......	......	......	......	......	......	....	1	1	4	4	4	1	34	49	49
Totals,		4	5	9	452	536	134	18	8	143	13	1,322	....	4	17	54	23	92	6	270	466	1,788
Delaware, Lackawanna and Western Railroad Co.																						
Storrs,	Lackawanna,	5	1	9	417	439	93	17	6	155	98	1,240	....	2	16	26	60	10	3	125	242	1,482
Pennsylvania Coal Co.																						
No. 1 Colliery,	Lackawanna,	2	3	1	338	265	113	7	3	115	27	874	....	1	10	14	30	14	2	24	95	969
Gipsy Grove,		1	....	....	88	80	41	3	......	22	.....	235	1	....	1	2	29	5	1	43	82	317
Totals,		3	3	1	426	345	154	10	3	137	27	1,109	1	1	11	16	59	19	3	67	177	1,286

Sterrick Creek Coal Co. Sterrick Creek, ...	Lackawanna,.....	2	1	1	250	240	98	30	2	47	45	716	1	1	19	22	50	20	4	101	218	934
Lackawanna Coal Co. Lackawanna, ...	Lackawanna,.....	3	1	1	200	200	68	10	10	40	53	586	1	1	16	16	45	30	2	85	196	782
Dolph Coal Co. Dolph, ...	Lackawanna,.....	2	....	....	163	85	59	9	3	13	10	344	1	1	20	22	40	42	7	82	215	559
Mount Jessup Coal Co. Mount Jessup, ...	Lackawanna,.....	1	1	3	85	92	24	8	9	41	5	269	1	1	11	21	29	11	2	75	151	420
Moosic Mountain Coal Co. Marshwood, ...	Lackawanna,.....	1	1	....	108	53	33	10	2	21	15	244	1	....	8	5	......	......	1	26	41	285
Blakely Coal Co. Blakely, ...	Lackawanna,.....	1	....	....	6	7	2	......	......	......	......	16	1	....	1	1	4	......	1	3	11	27
Mott Haven Coal Co. Mott Haven, ...	Lackawanna,.....	1	....	....	10	10	1	......	......	......	......	22	1	....	......	3	3	2	1	2	12	34
Grand totals, ...	....	28	21	33	2,870	2,567	970	205	69	597	540	7,900	11	15	162	275	427	388	36	1,172	2,486	10,386

TABLE 3.—Part 2

Names of Operators and Collieries	County	Number of Days Worked in Breaker												
		January	February	March	April	May	June	July	August	September	October	November	December	Total
Scranton Coal Co.														
Johnson,	Lackawanna,	22	19	23	22	21	18	21	22	20	21	21	19	249
Ontario,		....	....	5	23	23	22	24	24	22	23	21	20	207
Richmond No. 3,		21	19	19	21	20	19	21	22	17	22	22	19	242
Delaware and Hudson Co.														
Olyphant,	Lackawanna,	....	....	....	21	20	21	23	21	20	22	21	8	177
Eddy Creek,		20	18	21	21	21	21	21	21	21	21	19	22	247
Delaware, Lackawanna and Western Railroad Co.														
Storrs,	Lackawanna,	21	18	21	20	19	21	23	20	20	22	21	21	247
Pennsylvania Coal Co.														
No. 1 Colliery,	Lackawanna,	20	17	23	23	23	25	23	23	19	20	23	19	258
Gipsy Grove,		20	15	23	23	22	25	23	23	20	20	18	19	251
Sterrick Creek Coal Co.														
Sterrick Creek,	Lackawanna,	20	19	25	24	25	24	24	23	22	22	25	21	274
Lackawanna Coal Co.														
Lackawanna,	Lackawanna,	19	19	22	22	23	24	22	23	21	22	22	21	260
Dolph Coal Co.														
Dolph,	Lackawanna,	20	19	17	19	20	19	19	13	15	15	16	15	207
Mount Jessup Coal Co.														
Mount Jessup,	Lackawanna,	18	....	....	....	....	....	....	....	6	20	21	22	87
Moosic Mountain Coal Co.														
Marshwood,	Lackawanna,	15	....	....	....	....	....	....	....	5	18	19	18	75
Blakely Coal Co.														
Blakely,	Lackawanna,	20	18	19	11	19	19	21	20	20	21	19	20	227
Mott Haven Coal Co.														
Mott Haven,	Lackawanna,	....	....	....	....	....	....	....	11	23	26	25	25	110

TABLE 4.—Fatal accidents inside and outside of mines

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Number of widows	Number of orphans	Name of Mine	County	Nature and Cause of Accident in Brief
Jan.	4	William Miscarvin,	American,	Driver,	17	S.	....	....	Storrs No. 2,	Lackawanna,	Fatally injured by fall of roof in the face of chamber while taking the car up. The laborer allowed him to go to the face before it was examined by the miner after blasting.
	9	Edward Clark,	Irish,	Runner,	17	S.	....	....	Storrs No. 3,		Fatally injured by cars. He was walking ahead of the motor and sanding the rail on the gangway when he stumbled, and his legs were so badly lacerated that he died at the hospital February 1.
	18	John Harchalick,	Austrian,	Footman,	26	M.	1	1	Mount Jessup,		Instantly killed by falling down shaft. He pushed an empty car into the shaft thinking the cage was there and fell after it. The other footman had sent the cage away to hoist men from the other landing.
Feb.	5	Andrew Ruble,	Polish,	Miner,	33	M.	1	4	Johnson,		Fatally injured by fall of slip rock in the face of the chamber, where he was clearing the road.
	25	David P. Davis,	Welsh,	Miner,	37	M.	1	3	Storrs No. 2,		Fatally injured by blast near face of chamber. He and his partner were cleaning out a missed shot.
March	19	John Pianko,	Russian,	Miner,	40	M.	1	2	Lackawanna,		Fatally injured by blast at face of chamber. He was cleaning out a missed charge.
April	10	Joseph Savitski,	Polish,	Laborer,	38	M.	1	....	Johnson,		Fatally injured by fall of roof at face of chamber while he and the miner were making preparations to stand a prop.
	11	Richard Arscott,	Welsh,	Miner,	53	M.	1	....	Storrs No. 3,		Killed by fall of slip rock in the face of his working place. He did not detect the slip.
	25	Joseph Opay,	Polish,	Miner,	35	M.	1	3	Lackawanna,		Fatally injured by fall of roof at face of chamber while he was standing a prop under it.

TABLE 4.—Continued

Date of accident	Name of Person	Nationality	Occupation	Age	Married or single	Number of widows	Number of orphans	Name of Mine	County	Nature and Cause of Accident in Brief
April 26	John Novack,	Slavonian....	Laborer,	32	M.	1	3	Eddy Creek,	Lackawanna,	Killed by fall of roof that gave no indication of danger. The roof contained very thin slants. It was in the face of a gangway.
26	Patrick Gallagher,	Irish,	Miner,	36	M.	1	1			
27	Andrew Bibnes,	Polish,	Miner,	30	S.	....	....	Richmond No. 3,		Killed by blast at face of chamber. He was working alone and it is supposed returned too soon to what he thought was a missed shot.
May 17	Frank Sugers,	Polish,	Laborer,	30	M	1	1	Richmond No. 3,		Killed by blast at face of chamber. He had placed the squib in the hole and was waiting for the driver to take out the car when his light set off a feeder and exploded the charge.
24	Marino Tabyduski,	Italian,	Miner,	46	M.	1	4	Ontario,		Killed by fall of coal at face of chamber while working out a blast.
25	Naz Berchina,	Italian,	Laborer,	40	M.	1	3	Sterrick Creek,		Killed by fall of roof at face of chamber. He was assisting his miner to bar down some roof and when he heard it give he became frightened and ran under the fall.
June 4	Stephen Symonds,	English,	Miner,	52	M.	1	....	Eddy Creek,		Killed by fall of bell roof at face of chamber that he failed to detect. It was so large that it could not be detected by sound.
18	John Burnoski,	Polish,	Laborer,	20	S.	....	....	Johnson No. 1,		Killed by an explosion of fire-damp. A description of the accident will be found following Table 5.
18	Frank Burdeck,	Polish,	Miner,	35	S.	....	....			
18	Edward Marchefski,	Polish,	Laborer,	21	S.	....	....			
18	Wm. Wisner,	Lithuanian,	Miner,	34	M	1	5			
18	Walter Kilacavitch,	Lithuanian,	Laborer,	35	S.	....	....			
18	John Kilacavitch,	Lithuanian,	Laborer,	28	S.	....	....			
18	John Deimon,	Lithuanian,	Laborer,	28	S.	....	....			
25	John Carpin,	Russian,	Miner,	41	M.	1	4	Ontario,		Killed by a fall of slip coal while mining out a blast in a cross-cut at face of chamber.

June	26	John Zilaski,	Polish,	Miner,	56	M.	1	....	Lackawanna,	Lackawanna,	Fatally injured by blast at face of chamber. It is supposed that he shortened the match, as he was found within five feet of the hole.
	28	Alex. Smith,	Lithuanian,	Miner,	35	M	1	1	Richmond No. 3,		Killed by fall of roof at face of chamber. In throwing a mining rail out of the way it struck a prop which let the roof fall.
July	20	Michael Carter,	American,	Motorman,	16	S.	....	....	Eddy Creek,		Fatally injured by cars on gangway road. His lamp fell off and he jumped off to pick it up. In getting on he was squeezed between the rib and the motor.
	24	Wm. Klavinski,	Polish,	Laborer,	27	S.	....	....	Pennsylvania No. 2.		Klavinski and Cavrigan were killed in the same chamber by blasting. They were firing charges at the same time. A few seconds after Cavrigan called that he had fired the hole, the blast went off, killing him. The other miner had lit his charge also and when he saw Cavrigan killed ran towards the gangway calling for help. Klavinski responded and just reached the face when he was killed by the blast.
	24	Michael Cavrigan,	Irish,	Miner,	42	M	1	2			
	25	John Julock,	Polish,	Miner,	22	M.	1	1	Johnson No. 2,		Killed by blast at face of chamber. It is supposed that he shortened the match, as he was found only a short distance from the hole.
	29	John Sidonski,	Polish,	Laborer,	40	M.	1	2	Storrs No. 2,		Killed by fall of bell roof at face of chamber that gave no indication of danger.
Aug.	8	Michael Kulucky,	Slavonian,	Footman,	19	S.	....	....	Lackawanna,		Fatally injured by falling into the shaft sump and fracturing his skull. He walked into the sump instead of going around the usual passage.
	14	Stephen Matsago,	Slavonian,	Miner,	45	M.	1	4	Dolph,		Fatally injured by fall of roof at face of chamber that the foreman had ordered him to take down.
	15	Peter Pecossi,	Italian,	Laborer,	45	M.	1	....	Sterrick Creek,		Killed by mine cage at foot of shaft. He attempted to get on the cage after the footman gave the signal to hoist.
	20	Edward Kelley,	Irish,	Miner,	64	M.	1	1	Storrs No. 3,		Fatally burned by explosion of gas. After firing a hole he sat down for a lunch; when he returned he lit a pocket of gas and was burned so that he died on the 26th.
Sept.	4	Salvatore Novac,	Italian,	Miner,	34	S.	....	....	Ontario,		Killed by explosion of powder. He was preparing black and dynamite powder and using a blasting barrel. It is supposed that the wire scraped the cap and ignited it.
	12	William Motts,	Polish,	Runner,	20	S.	....	....	Johnson No. 1,		Fatally injured by kick from a mule. He was trying to drive the mule out of an abandoned chamber into which he had run.

TABLE 4.—Continued

Date of accident	Name of Person	Nationality	Occupation	Age	Married or single	Number of widows	Number of orphans	Name of Mine	County	Nature and Cause of Accident in Brief
Sept. 20	Patrick Eagan,	Irish,	Doortender,	65	M	1	....	Richmond No. 3,	Lackawanna,	Killed by cars on the gangway. His door was at a junction where some cars were standing. They were running cars down on the other track and Eagan in excitement ran directly where the cars bumped.
24	John Rosinni,	Italian,	Laborer,	38	M.	1	4	Ontario,		Killed by fall of bell roof at face of gangway.
26	Walter Chronietski,	Polish,	Brakeman,	20	S.	....	....	Dolph,		Killed by cars. He was riding on the head end of a trip of cars that were being pushed to the top of breaker and in some way fell under. No one saw him fall.
30	Michael Brushki,	German,	Miner,	36	M.	1	3	Storrs No. 1,		Fatally burned by explosion of gas at face of chamber. He tapped a strong feeder of gas unexpectedly.
Oct. 16	Stephen Dubrawezk,	Slavonian,	Driver,	17	S.	....	....	Johnson No. 1,		Fatally injured by cars. He fell under the cars while running from the bottom of one plane to the top of another.
18	John Seyna,	Austrian,	Miner,	36	M.	1	2	Pennsylvania No. 1.		Killed by blast at face of chamber. He heard the squib miss and after waiting as he thought long enough returned just as the charge went off.
Nov. 6	Geo. Lugan,	Slavonian,	Headman,	18	S.	....	....	Sterrick Creek,		Fatally injured by cars. He was standing between the empty and loaded tracks signaling to the engineer who was pushing the cars to the head of an inside slope. A car became derailed and discharged a prop that struck him, injuring him so badly that he died at the hospital on the 14th.

Nov.	7	Delbert Merrigan,	German,	Slatepicker,	16	S.	....	....	Ontario,	Lackawanna,	Killed by machinery. He was assisting his father to make some repairs on the angle bars near the foot of conveyor line. His father told him that they expected to start the conveyors at any time and he should keep away. He evidently forgot and his foot was caught and he was dragged in.
	11	Henry Morgan,	Welsh,	Miner,	55	M.	1	....	Storrs No. 2,		Fatally injured by fall of roof at face of chamber while he was re-standing a prop discharged by a blast.
	16	Berney Yulcavige,	Polish,	Laborer,	19	S.	....	....	Johnson No. 2,		Fatally injured by cars. He was waiting to block an empty car in the face of chamber. The car struck the end block strongly and knocked the rear end off, catching his head against the rib.
	18	Andrew Gerchuk,	Austrian,	Miner,	28	M.	1	3	Lackawanna,		Fatally injured by blast at face of chamber. He was firing a missed shot and had only gotten a short distance from the hole.
	29	Orlando Jones,	Welsh,	Sinker,	35	M.	1	1	Olyphant,		Fatally injured by blast on the shaft. While charging a hole he put four sticks in, and in putting in the fifth it exploded.
Dec.	17	Wendel Davis,	American,	Driver,	17	S.	....	....	Lackawanna,		Instantly killed by fall of bell roof in the face of a chamber. The miner inside was firing and Davis went into the next chamber for safety. The jar of the blast caused an undetected bell to fall where he was standing.
	19	Peter Galitski,	Lithuanian,	Miner,	38	M.	1	3	Richmond No. 3,		Instantly killed by fall of bell roof while standing props that had been discharged by a blast.

TABLE 5.—Non-fatal accidents inside and outside of mines

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Name of Mine	County	Nature and Cause of Accident in Brief
Jan.	5	Louis Sercentine, ...	Italian,......	Laborer, ...	38	M.	Dolph, ...	Lackawanna,	Leg fractured by fall of roof at face of chamber while standing a discharged prop after a blast.
	8	John Mouslefsky, ..	Polish,.......	Laborer, ...	31	M.	Johnson No. 1, .		Leg fractured by fall of slip rock at face of chamber.
	18	David Turner, ...	American,...	Driver boss, ...	44	M.	Storrs No. 2, ...		Leg fractured by car at top of plane. They were pulling a derailed car to the track when it caught and was thrown on his leg.
	26	James Baldonie, ...	Italian,......	Footman, ...	18	S.	Mt. Jessup, ...		Legs fractured by car at foot of slope. A trip ran away and caught him.
	26	Joseph Wofeski, ...	Polish,.......	Slatepicker, ...	16	S.	Storrs, ...		Arm fractured by machinery. While putting a belt on wheel his clothes caught. Outside.
Feb.	7	William Priest, ...	English,.....	Carpenter, ...	70	M.	Lackawanna, ...		Rib fractured by platform falling on which he was working. Outside.
	14	Andrew Novorski, ..	Russian,.....	Runner, ...	20	S.	Lackawanna, ...		Collar bone fractured by being squeezed between car and breaker. Outside.
	18	Robert Jakes, ...	American,...	Driver, ...	17	S.	Storrs No. 3, ...		Leg fractured by fall of roof while he was waiting in the face of chamber for the runner to run the car.
	25	David Eynon, ...	American,...	Miner, ...	35	M.	Storrs No. 2, ...		Severely injured by blasting. He and his partner were cleaning out a missed shot.
	26	Anthony Ruble, ...	Polish,.......	Runner,.............	18	S.	Johnson, ...		Leg fractured by being struck by a car.
	27	John Polki, ...	Slavonian,...	Miner, ...	42	M.	Lackawanna, ...		Leg fractured by blasting at face of chamber.
	27	Stanley Krocofski, ..	Polish,.......	Miner, ...	30	M.	Johnson, ...		Burned on face and hands by explosion of gas at face of chamber. He walked past a danger sign with safety lamp in his hand and naked light on his head.
March	22	Patrick Reckles, ...	Polish,.......	Loader, ...	18	S.	Johnson, ...		Serious laceration of leg while uncoupling cars in motion. Outside.
April	4	Peter Matusheck, ...	Austrian,....	Driver, ...	17	S.	Eddy Creek, ...		Leg fractured by cars becoming derailed on the gangway.

April	20	Michael Omze, ...	Slavonian,...	Driver, ...	18	S.	Eddy Creek, ...	Lackawanna,	Three fingers severed while spragging cars.
	22	Joseph Germinder, ..	American,...	Footman, ...	28	M.	Johnson No. 1, .		Knee dislocated on mine cage. The cage struck the fans in passing. A pin fell out and allowed the fans to open.
	24	Stephen Gamolki, ..	Polish,.......	Driver, ...	22	S.	Lackawanna, ...		Arm fractured while putting on a derailed car.
	30	Frank Hartman, ...	American,...	Driver, ...	17	S.	Eddy Creek, ...		Leg fractured by slipping on rail while walking up plane.
May	8	Michael Shalky, ...	Polish,.......	Driver, ...	17	S.	Ontario, ...		Injured internally by being squeezed between cars and rib.
	13	Peter Polinsko, ...	Polish,.......	Miner, ...	36	M.	Pennsylvania No. 1.		Fractured leg by fall of roof at face of chamber.
	17	Thomas Zensmey, ...	Polish,.......	Miner, ...	34	M.	Richmond No. 3,.		Seriously injured by premature blast at face of chamber.
June	1	John Magi, ...	Greek,.......	Laborer, ...	35	S.	Ontario, ...		Leg fractured by fall of roof at face of chamber.
	6	Alex. Frazier, ...	American,...	Motorman, ...	24	M.	Dolph, ...		Arm fractured by cars in the chamber.
	7	Stephen Moronko, ...	Russian,.....	Plateman, ...	38	M.	Eddy Creek, ...		Knee injured by rails falling on him from derailed car. Outside.
	18	Alex. Lapinski, ...	Polish,.......	Miner, ...	23	M.	Johnson No. 1, .		Burned by explosion of gas.
	18	John Golinski, ...	Lithuanian,.	Laborer, ...	19	S.			
	21	Daniel Dierko, ...	American,...	Sinker, ...	32	S.	Storrs No. 1, ...		Leg fractured by a falling board in the shaft.
July	5	John Povrich, ...	Polish,.......	Miner, ...	24	M.	Sterrick Creek, ...		Leg fractured by fall of roof in an abandoned chamber.
	5	William Playforth, ..	English,.....	Miner, ...	43	M.	Storrs No. 3, ...		Injured about stomach by fall of rock while mining at face of chamber.
	10	Valentine Leggie, ...	Italian,......	Laborer, ...	29	M.	Lackawanna, ...		Leg broken by derailed car at face of chamber.
	12	Joseph Padora, ...	Italian,......	Laborer, ...	42	M.	Sterrick Creek, ..		Leg fractured by attempting to get on mine cage after the footman gave the signal.
	15	J. A. Laubach, ...	German,.....	Miner, ...	57	M.	Pennsylvania No. 1.		Leg fractured by cars on the gangway.
	18	Louis Nornick, ...	American,...	Driver, ...	18	S.	Johnson No. 1, ...		Stomach injured by kick from a mule.
	20	James Loughney, ...	Irish,.........	Runner, ...	35	S.	Richmond No. 3,..		Leg fractured by cars on the gangway.
Aug.	6	Peter Logan, ...	Irish,.........	Miner, ...	52	M.	Richmond No. 3,..		Leg fractured by fall of roof at face of chamber.
	7	Samuel Russen, ...	Russian,.....	Miner, ...	40	M.	Lackawanna, ...		Leg fractured by fall of roof at face of chamber.
	26	Samuel Monicell, ...	Italian,......	Miner, ...	45	M.	Sterrick Creek, ...		Burned about face and body by powder.
Sept.	3	Bert Simmins, ...	American,...	Driver, ...	16	S.	Johnson No. 1, ...		Leg fractured by car bumping the trip he was uncoupling at foot of plane.
	4	Robert R. Edwards, ..	American,...	Motorman, ...	37	M.	Storrs No. 2, ...		Leg fractured by recoil of a chain.
	11	William Matucheck,..	Polish,.......	Miner, ...	30	S.	Lackawanna, ...		Laceration of face and hands by a fall of roof at face of chamber.
	12	Joseph Hyzint, ...	American,...	Company man, ...	29	S.	Storrs No. 1, ...		Three ribs fractured while coupling cars at face of chamber.
	14	George Reisco, ...	Slavonian,...	Carpenter, ...	40	S.	Lackawanna, ...		Foot crushed by cars on gangway.
	19	John Charnoski, ...	Polish,.......	Laborer, ...	45	S.	Dolph, ...		Laceration of scalp and two ribs broken by fall of rock at face of chamber.
	23	John Grobaski, ...	Polish,.......	Footman, ...	27	S.	Storrs No. 2, ...		Dislocation of arm by prop falling on him.
	30	Albert Golumb, ...	Polish,.......	Laborer, ...	24	M.	Storrs No. 1, ...		Burned on face and hands by explosion of gas at face of chamber.

TABLE 5.—Continued

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Name of Mine	County	Nature and Cause of Accident in Brief
Oct.	3	Ambrose Carey,	American,	Car runner,	18	S.	Sterrick Creek,	Lackawanna,	Leg fractured by railroad cars. Outside.
	7	Martin Crate,	Russian,	Miner,	39	M.	Ontario,		Breast and shoulder injured by fall of roof at the box where he was making powder.
	14	Frank Mackeravage,	Polish,	Miner,	52	M.	Storrs No. 2,		Injured by blasting while tamping a hole at face of chamber.
	14	Michael Yerchumski,	Polish,	Laborer,	40	M.			
	23	Anthony Rochester,	Polish,	Miner,	32	S.	Richmond No. 3,		Burned about face and hands by explosion of gas at face of chamber while brushing out.
	24	William Ward,	American,	Engineer,	23	S.	Sterrick Creek,		Foot crushed by machinery in engine room.
Nov.	8	Lewis Harris,	Welsh,	Driver,	17	S.	Richmond No. 3,		Arm fractured by cars on the gangway.
	14	James O'Boyle,	American,	Laborer,	23	S.	Olyphant,		Back injured by fall of slant roof at face of chamber.
	15	Anthony Lucashic,	Polish,	Miner,	30	M.	Olyphant,		The miner's leg was fractured and the laborer's scalp wounded by fall of roof at face of chamber.
	15	Stephen Swentok,	Polish,	Laborer,	34	M.	Olyphant,		
	30	Joseph Honney,	American,	Driver,	16	S.	Olyphant,		Arm lacerated by falling under cars at face of chamber.
Dec.	6	Wm. Antony,	Lithuanian,	Miner,	46	M.	Storrs No. 3,		Collar bone fractured by being dragged by cars along the gangway.
	7	Edward Bowden,	English,	Driver,	16	S.	Richmond No. 3,		Skull fractured by kick from a mule.
	7	Peter Hicks,	Austrian,	Laborer,	52	M.	Ontario,		Scalp and leg injured by slipping on the rail while passing before a moving trip of cars. Outside.
	16	Isadore Burdyn,	Polish,	Miner,	33	M.	Johnson No. 1,		Collar bone and two ribs fractured by fall of roof at face of chamber.
	18	John Walchock,	Slavonian,	Brakeman,	22	S.	Dolph,		Leg fractured while uncoupling cars in motion. Outside.
	19	Thomas Evans,	Welsh,	Miner,	53	M.	Storrs No. 1,		Leg fractured by being struck by flying coal while running away from blast.

EXPLOSION OF GAS

At 12.15 noon, June 18, an explosion of fire-damp occurred in the chamber of the first East Lift in the Dunmore vein, in the Johnson mine of the Scranton Coal Company. It is supposed that the explosion was caused by an unexpected increase of gas in the face of the chamber where John Galinski was working with a naked light. He was severely burned about the face and hands. The force of the explosion blew down a main stopping between the first and second lifts, which allowed the air to enter the return, instead of first entering the working faces in the lower lifts, thus causing an accumulation of gas. Immediately after the first explosion all the men in the lower lift came out to the main door of the intake. They were met there shortly by the men from the upper lift, who advised them not to return to the second lift, but to accompany them home. Some decided to go home and the others, after remaining a short time, decided to return for their dinner pails. They proceeded only a short distance when their lights exploded the gas and killed seven persons.

The coroner's jury after inquiring into the cause of their death rendered the following verdict: "We find that they came to their death June 18, 1907, as a result of a gas explosion in the Johnson mine of the Scranton Coal Company. From the evidence presented, all of the men lost their lives as the result of a second explosion following a first explosion which all escaped. The evidence is to the effect that all of the victims were warned of the danger and advised not to go back into their chamber. Disregarding the warning they started back and ignited the gas, causing an explosion, resulting in the death of seven men. Whereas, we are of the opinion that the company was in no way to blame or responsible for the disaster."

CONDITION OF COLLIERIES

SCRANTON COAL COMPANY

Johnson Colliery No. 1 shaft.—Condition as to safety good, drainage good, except in the Diamond vein.

No. 2. Shaft.—Condition as to safety and drainage good; ventilation fair. A fan is now being installed on the mountain to improve the ventilation.

Ontario Colliery.—Tunnel condition as to safety, drainage and ventilation good.

Klondyke.—Condition as to safety and drainage good, ventilation fair. A surface opening is being driven and a fan installed, which will improve the ventilation.

Sturgess Shaft.—Condition as to safety, drainage and ventilation good.

Blue Ridge Shaft.—Condition as to safety and drainage good, ventilation fair. There is room for improvement.

Blue Ridge Tunnel.—Condition as to safety good, drainage and ventilation fair. They are robbing pillars.

Richmond No. 3 Colliery.—Condition as to safety good, drainage fair, ventilation good.

DELAWARE AND HUDSON COMPANY

Olyphant Colliery No. 2 Shaft.—Condition as to safety and drainage good, ventilation generally good.

Grassy Island Slope.—Condition as to safety and drainage good, ventilation good with the exception of the Four Foot vein. This vein is very difficult to ventilate as it is thin and the roof is continually falling in the air courses.

Grassy Island Shaft.—Condition as to safety and drainage good, ventilation fair. There is room for improvement.

Eddy Creek Colliery, Birds Eye Mines.—Condition as to safety, drainage and ventilation good.

No. 4 Drift.—Condition as to safety good, drainage and ventilation fair.

DELAWARE, LACKAWANNA AND WESTERN RAILROAD COMPANY

Storrs Colliery No. 1 Shaft.—Condition as to safety, drainage and ventilation good.

No. 2 Shaft.—Condition as to safety and drainage good, ventilation fair. There is room for improvement.

PENNSYLVANIA COAL COMPANY

No. 1 Colliery No. 1 Shaft.—Condition as to safety and drainage good, ventilation fair.

No. 2 Shaft.—Condition as to safety and drainage good, ventilation fair.

Gipsy Grove Colliery.—Condition as to safety, drainage and ventilation good. This mine has been very much improved.

STERRICK CREEK COAL COMPANY

Sterrick Creek Colliery.—Condition as to safety, drainage and ventilation good. Six air bridges were built during the year, which improved the ventilation.

LACKAWANNA COAL COMPANY

Lackawanna Colliery.—Condition as to safety, drainage and ventilation good.

DOLPH COAL COMPANY

Dolph Colliery, Hackley Slope.—Condition as to safety, drainage and ventilation good.

Hannah Bell.—Condition as to safety good, drainage and ventilation fair.

MOUNT JESSUP COAL COMPANY

Mount Jessup Colliery, Peck's Shaft.—Condition as to safety good, drainage fair, ventilation good.

MOOSIC MOUNTAIN COAL COMPANY

Marshwood Drift.—Condition as to safety good, drainage poor, but it is being improved. Ventilation fair.

BLAKELY COAL COMPANY

Blakely.—Condition as to safety, drainage and ventilation good.

MOTT HAVEN COAL COMPANY

Mott Haven.—Condition as to safety, drainage and ventilation good.

IMPROVEMENTS

SCRANTON COAL COMPANY

Johnson.—Man shaft tower rebuilt.

Ontario.—Three new locomotive type boilers installed. New washery built.

Bryden Shaft.—Fourteen foot fan constructed in brick and concrete.

DELAWARE AND HUDSON COMPANY

Olyphant.—No. 16 Rock Plane driven from Diamond to Four Foot, a distance of 103 feet.

No. 18 Rock Plane driven 475 feet through fault in Diamond vein.

No. 10 Rock Slope (Miles) driven 842 feet from Rock to No. 4 Dunmore vein.

Grading 400 feet of No. 3 Tunnel from Rock to Fourteen Foot vein.

No. 9 Rock Plane driven 108 feet from Fourteen Foot toward Rock vein.

Grassy Island.—At Grassy No. 1 Rock Tunnel from New County to Fourteen Foot vein, driven 210 feet for second opening.

Rock Plane from Four Foot to No. 2 vein driven 200 feet.

Shaft from surface to No. 2 vein sunk 36 feet for second opening.

No. 4 Dunmore vein opened in Grassy No. 2 Shaft, 250 feet on east side and 100 feet on west side, and Clark vein opened 75 feet on east side.

Grassy Island No. 4 shaft sinking down a distance of 611 feet, not completed.

DELAWARE, LACKAWANNA AND WESTERN RAILROAD COMPANY

Storrs No. 3.—A new ventilating fan has been placed and is in operation at Storrs No. 3 steel casting and brick building.

PENNSYLVANIA COAL COMPANY

No. 1 Colliery Outside.—A brick building 18 feet x 18 feet to be used as an electric light plant, containing one 8 x 10, 40 H. P. engine, 100 ampere, continuous current 250 volts. Also one brick building 24 feet x 38 feet, with an annex 9 feet x 23 feet. This building contains one pair 12 x 24 hoisting engines to operate two inside slopes in No. 1 Shaft, one in the third Dunmore vein and one in the second Dunmore vein, which is being driven.

No. 1 Shaft, Inside.—One 10-inch bore hole from surface to third Dunmore vein for steam line; this will do away with steam line in the shaft. Also one 3-inch bore hole to second Dunmore vein, both of which are to be used for rope haulage on slopes. New slope in second Dunmore vein 6 feet x 12 feet has been extended 450 feet.

No. 2 Shaft, Inside.—Engine plane in second Dunmore vein extended 400 feet.

Gipsy Grove, Inside.—One 10-inch bore hole from surface to third Dunmore vein, one 3-inch bore hole from surface to third Dunmore vein. One Dunmore pump 102 plunger, 30-inch stroke, to be used for the purpose of pumping water to supply No. 1 washery.

STERRICK CREEK COAL COMPANY

Sterrick Creek Colliery.—A steam boiler plant, consisting of four 250 horse power Maxim boilers, was erected to replace the two small plants, which consisted of one high and low pressure plant. The foundations of the new boiler house are of concrete and the building is constructed of gray brick, with iron roof trusses and corrugated iron roof. The boiler foundations are constructed of building stone, and the boiler settings of red brick.

MINE FOREMEN'S EXAMINATIONS

The following persons having passed a satisfactory examination were granted certificates of qualification:

Mine Foremen

Frank Good, Scranton; William Lewis, Scranton; Thomas J. Moyle, Simpson; James Horan, Carbondale; George T. Williams, Peckville; Joseph J. Munley, Dickson City; Herbert Spencer, Carpenter, Scranton.

Assistant Mine Foremen

David D. Morgan, Peckville; Isaac Morgan, Scranton; Andrew H. Smith, Jr. Scranton; Edwin S. Jones, Scranton; Joseph A. McCabe, Blakely; Thomas D. Llewellyn, Peckville; James Stephens, Taylor; James H. James, Olyphant; George W. Morgan, Olyphant; Charles J. Latcham, Scranton; Edward R. Edwards, Olyphant; John Brooks, Olyphant.

Third District

LACKAWANNA COUNTY

Scranton, Pa., February 22, 1908.

Hon. James E. Roderick, Chief of Department of Mines:

Sir: I have the honor of transmitting herewith my report as Inspector of Mines for the Third Anthracite District for the year ending December 31, 1907, as required by the Act of April 14, 1903.

Respectfully submitted,

H. O. PRYTHERCH,
Inspector.

SUMMARY OF STATISTICS

Number of collieries,	21
Number of mines,	28
Number of mines in operation,	28
Number of tons of coal shipped to market,	4,311,086
Number of tons used at mines for steam and heat,	404,810
Number of tons sold to local trade and used by employes,	142,831
Number of tons produced,	4,858,727
Number of tons produced by electrical machines.	—
Number of tons produced by compressed air machines,	—
Number of persons employed inside of mines,	7,894
Number of persons employed outside,	2,280
Number of fatal accidents inside of mines,	41
Number of fatal accidents outside,	4
Number of non-fatal accidents inside of mines,	66
Number of non-fatal accidents outside,	7
Number of tons of coal produced per fatal accident inside,	118,506
Number of persons employed per fatal accident inside,	193
Number of persons employed per fatal accident outside,	570
Number of persons employed per non-fatal accident inside,	120
Number of persons employed per non-fatal accident outside,	326
Number of wives made widows,	26
Number of children orphaned,	57
Number of steam locomotives used outside,	7
Number of compressed air locomotives used inside,	23
Number of electric motors used inside,	23
Number of fans in use,	26
Number of gaseous mines in operation,	19
Number of non-gaseous mines in operation,	9

TABLE A

PRODUCTION OF COAL

Names of Operators	Tons
Delaware, Lackawanna and Western Railroad Company,	1,447,985
Delaware and Hudson Company,	1,373,306
Scranton Coal Company,	751,417
Price-Pancoast Coal Company,	662,157
Pennsylvania Coal Company,	159,049
Green Ridge Coal Company,	135,933
North End Coal Company,	102,258
A. D. and F. M. Spencer,	84,154
Carney and Brown,	51,393
Economy Light, Heat and Power Company,	44,595
J. J. Gibbons,	16,325
Bull's Head Coal Company,	14,484
Nay Aug Coal Company,	13,091
Mountain Lake Coal Company,	3,580
Total,	4,858,727

Production by Counties

Lackawanna,	4,858,727

TABLE B.—Fatal and non-fatal accidents inside and outside of mines; number of tons of coal produced per accident; number of persons employed; number employed per accident

Names of Operators	Fatal Accidents			Non-fatal Accidents			Tons of coal produced per fatal accident inside	Tons of coal produced per non-fatal accident inside	Number of employes inside	Number of employes outside	Total number of employes	Number of employes inside per fatal accident	Number of employes outside per fatal accident	Number of employes inside per non-fatal accident	Number of employes outside per non-fatal accident
	Inside	Outside	Total	Inside	Outside	Total									
Delaware, Lackawanna and Western Railroad Co.,	8	1	9	16	5	21	180,998	90,499	2,128	563	2,691	266	563	133	113
Delaware and Hudson Co.,	15	....	15	26	1	27	91,554	52,819	2,372	593	2,965	158	....	91	593
Scranton Coal Co.,	10	....	10	7	....	7	75,142	107,345	1,355	465	1,820	136	....	194	....
Price-Pancoast Coal Co.,	5	....	5	5	....	5	132,431	132,431	1,093	269	1,362	219	....	219	....
Pennsylvania Coal Co.,	1	....	1	7	....	7	159,049	22,721	284	81	365	284	....	41	....
Green Ridge Coal Co.,	1	....	1	3	1	4	135,933	45,311	222	82	304	222	....	74	82
North End Coal Co.,	....	....	....	1	....	1	....	101,258	233	81	314	....	....	233	....
A. D. and F. M. Spencer,	....	1	1	1	....	1	....	84,154	49	47	96	....	47	49	....
Economy Light, Heat and Power Co.,	....	1	1	....	....	....	....	....	....	13	13	....	13	....	....
Bull's Head Coal Co.,	1	....	1	....	....	....	14,484	....	45	18	63	45	....	....	....
Nay Aug Coal Co.,	....	1	1	....	....	....	....	....	15	12	27	....	12	....	....
Miscellaneous companies,	....	....	....	....	....	....	....	....	98	56	154	....	....	....	....
Totals and averages for district,	41	4	45	66	7	73	118,506	73,617	7,894	2,280	10,174	193	570	120	326

TABLE C.—Classification of Fatal Accidents Inside and Outside of Mines

	Months													
	January	February	March	April	May	June	July	August	September	October	November	December	Totals	Percentages
Causes of Accidents Inside														
Falls of roof,	1	1	....	2	5	2	2	1	1	2	4	1	22	53.66
Mine cars,	1	1	....	....	1	....	2	....	....	....	1	....	6	14.63
Explosions of powder and dynamite,	....	....	....	1	....	....	1	....	....	....	....	....	2	4.88
Premature blasts,	1	....	....	1	....	1	....	1	1	1	....	2	8	19.51
Falling into shafts,	....	1	....	....	....	....	....	....	....	....	....	....	1	2.44
Mules,	....	....	....	....	....	....	....	....	....	....	....	1	1	2.44
Miscellaneous,	....	....	....	....	....	....	....	....	....	1	....	....	1	2.44
Totals,	3	3	....	4	6	3	5	2	2	4	5	4	41	100.00
Causes of Accidents Outside														
Machinery,	....	1	....	....	....	....	....	....	....	2	....	....	3	75.00
Miscellaneous,	....	....	....	....	....	....	....	....	1	....	....	....	1	25.00
Totals,	....	1	....	....	....	....	....	....	1	2	....	....	4	100.00
Grand totals inside and outside,	3	4	....	4	6	3	5	2	3	6	5	4	45	......

TABLE D.—Classification of Non-fatal Accidents Inside and Outside of Mines

	Months													
	January	February	March	April	May	June	July	August	September	October	November	December	Totals	Percentages
Causes of Accidents Inside														
Falls of roof,	4	....	1	....	1	2	1	1	2	4	1	2	19	28.79
Mine cars,	2	2	....	1	4	2	1	2	3	2	5	3	27	40.91
Explosions of gas and dust,	....	3	....	....	....	1	....	1	....	....	1	....	6	9.09
Explosions of powder and dynamite,	....	....	....	1	....	....	1	....	....	....	....	....	2	3.03
Premature blasts,	2	2	....	1	....	....	....	....	....	....	....	2	7	10.61
Mules,	....	....	....	....	....	....	....	....	....	1	....	1	2	3.03
Miscellaneous,	1	....	....	....	....	....	....	....	1	....	....	1	3	4.54
Totals,	9	7	1	3	5	5	3	4	6	7	7	9	66	100.00
Causes of Accidents Outside														
Cars,	....	....	1	....	....	....	....	....	....	....	....	....	1	14.29
Machinery,	1	....	....	....	....	....	....	....	....	....	....	....	1	14.29
Miscellaneous,	....	....	....	....	1	1	2	....	....	....	....	1	5	71.42
Totals,	1	....	1	....	1	1	2	....	....	....	....	1	7	100.00
Grand totals inside and outside,	10	7	2	3	6	6	5	4	6	7	7	10	73	......

TABLE E.—Occupations of Persons Killed or Fatally Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Inside													
Miners,	1	....	....	3	1	2	1	...	...	1	4	1	14
Miners' laborers,	2	1	....	1	3	1	2	2	2	2	....	1	17
Drivers and runners,	....	....	....	...	....	....	....	....	....	....	...	2	2
Doorboys and helpers,	....	1	....	...	...	....	...	...	....	1	1	...	3
All other employes,	....	1	....	...	2	....	2	....	....	....	....	....	5
Totals,	3	3	....	4	6	3	5	2	2	4	5	4	41
Outside													
Blacksmiths and carpenters,	....	....	....	...	....	....	....	....	1	....	....	....	1
Engineers and firemen,	....	....	....	...	...	....	....	....	....	1	....	....	1
All other employes,	....	1	....	...	....	....	....	....	....	1	....	....	2
Totals,	....	1	....	...	....	....	....	....	1	2	....	....	4
Grand totals inside and outside,	3	4	....	4	6	3	5	2	3	6	5	4	45

TABLE F.—Occupations of Persons Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Inside													
Fire bosses and assistants,	....	1	....	...	....	....	....	1	....	....	....	....	2
Miners,	5	4	1	2	1	3	1	1	1	3	....	2	24
Miners' laborers,	2	2	....	....	2	1	2	1	3	....	3	3	19
Drivers and runners,	1	....	....	1	1	1	....	1	1	3	2	2	13
Doorboys and helpers,	....	....	....	....	1	....	....	....	....	....	....	2	3
Company men,	1	....	....	....	....	....	....	....	....	....	....	....	1
All other employes,	....	....	....	...	....	....	....	....	1	1	2	....	4
Totals,	9	7	1	3	5	5	3	4	6	7	7	9	66
Outside													
Blacksmiths and carpenters,	....	....	....	...	....	....	2	....	....	....	....	....	2
Engineers and firemen,	....	....	....	....	....	....	....	....	....	....	....	1	1
All other employes,	1	....	1	....	1	1	....	....	....	....	....	....	4
Totals,	1	....	1	....	1	1	2	....	....	....	....	1	7
Grand totals inside and outside,	10	7	2	3	6	6	5	4	6	7	7	10	73

TABLE G.—Nationality of Persons Killed or Fatally Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
American,	....	....	....	....	1	1	1	....	1	2	....	....	6
English,	....	....	....	....	....	....	1	....	....	....	1	....	2
Welsh,	1	1	....	....	....	....	....	1	....	....	....	1	4
Scotch,	....	....	....	1	....	....	....	....	....	....	....	....	1
Irish,	....	....	....	1	1	1	....	....	....	....	1	1	5
Polish,	....	2	....	1	2	....	3	....	2	2	2	1	15
Hungarian,	....	1	....	....	1	....	....	....	....	....	....	....	2
Italian,	1	....	....	....	....	....	....	....	....	....	....	....	1
Slavonian,	....	....	....	....	....	....	....	1	....	....	1	....	2
Lithuanian,	....	....	....	1	1	....	....	....	....	2	....	1	5
Russian,	1	....	....	....	....	1	....	....	....	....	....	....	2
Totals,	3	4	....	4	6	3	5	2	3	6	5	4	45

TABLE H.—Nationality of Persons Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
American,	2	2	1	....	1	1	2	1	1	3	4	3	21
English,	....	....	....	....	....	....	....	....	....	....	1	....	1
Welsh,	....	1	....	....	1	....	....	....	....	....	....	....	2
Scotch,	1	....	....	....	....	....	....	....	....	....	....	....	1
Irish,	1	....	....	....	....	....	....	1	2	1	....	1	6
German,	....	....	....	....	....	....	1	....	1	....	....	....	2
Polish,	1	1	1	....	....	3	....	....	2	1	1	3	13
Hungarian,	1	....	....	....	....	....	....	....	....	....	....	....	1
Italian,	1	....	....	1	2	1	1	....	....	1	....	....	7
Slavonian,	2	1	....	....	1	....	....	1	....	....	....	....	5
Lithuanian,	1	2	....	1	1	1	....	....	....	....	1	1	8
Austrian,	....	....	....	....	....	....	....	....	....	1	....	1	2
Russian,	....	....	....	1	....	....	1	1	....	....	....	1	4
Totals,	10	7	2	3	6	6	5	4	6	7	7	10	73

TABLE I.—Operators and mines, kind of openings, type and size of fans, size of furnaces, volume of air produced by fan or furnace per minute, number of splits of air currents, and number of persons employed inside

Names of Operators and Mines	Kind of opening	Gaseous or non-gaseous	Method of ventilation	Diameter of fan in feet	Width of blades in feet	Depth of blades in feet	Number of revolutions per minute	Water gauge developed—in inches	Name of fan	Power used	Area of furnace bars in square feet	Number of splits of air currents	Number of cubic feet of air per minute entering the mine at inlet	Total quantity of air per minute circulating in all the splits in cubic feet	Number of persons employed inside
Delaware, Lackawanna and Western Railroad Co.															
Brisbin,	Shaft,...	Gaseous,...	Fan,.....	14	4	4	138	.9	Open running,.	Steam,.......	....	10	144,745	128,690	408
Cayuga,	Shaft,...	Gaseous,...	Fan,.....	12	3.5	4	138	.9			....	10	121,000	109,400	304
Diamond Colliery:															
Diamond,	Shaft,...	Gaseous,...	Fan,.....	14	4	4	85	.5			....	10	195,988	99,829	253
Diamond,	Drift,...	Non-gas....	Fan,.....	14	4	4	96	1.8			....	4	34,375	29,140	135
Tripp Colliery:															
Tripp,	Shaft,...	Gaseous,...	Fan,.....	16	6	6.5	104	.8			....	3	62,850	53,300	167
Tripp,	Slope,...	Gaseous,...	Fan,.....	14	4	4	108	.8			....	2	50,440	46,160	15
				20	6	5.6	68	......							
Manville,	Shaft,...	Gaseous,...	Fans,....	20	6	5.6	78	1.5			....	11	216,950	191,260	368
Delaware and Hudson Co.															
Marvine Colliery:															
Marvine,	Shaft,..	Gaseous,.	Fan,.....	22	5	5	80	1.4	Guibal, ...	Steam,.....	....	6	174,480	139,740	249
Marvine,	Slope,..		Fan,.....	20	5	5	66	1.2			....	5	181,900	165,060	236
Legitts Creek Colliery:															
Legitts Creek No. 1,	Shaft,..		Fan,.....	20	5	6	75	2.5			....	....	....	....	.....
Legitts Creek No. 2,	Shaft,..		Fan,.....	20	5	6	75	1.5			....	9	175,070	160,900	420
Legitts Creek No. 3,	Shaft,..		Fan,.....	22	6	6	90	4			....	6	154,200	129,200	274
				20	6	5	76	1.4							
Dickson,	Shaft,..		Fan,.....	20	6	5	85	1.7			....	10	266,290	226,500	459
Von Storch,	Slope,..		Fan,.....	22	5	5	83	2.3			....	10	157,270	153,670	468

Scranton Coal Co.															
Pine Brook, ...	Shaft,....	Gaseous,...	Fans,....	17 17	4 6	4 6	 102	...... 1.2	Guibal, ...	Steam,.....	....	10	216,450	195,700	500
Mount Pleasant Colliery:															
Mount Pleasant (Main),.....	Shaft,....	Gaseous,...	Fan,.....	20	5	5	60	.7			....	10	124,690	114,200	165
Mount Pleasant (Surface),..	Shaft,....	Non-gas....	Fan,.....	12	3	3	114	.9			....	9	47,500	43,000	125
West Ridge, ...	Shaft,....	Gaseous,...	Fan,.....	20	5	5	66	1.2			....	4	44,100	40,600	124
Price-Pancoast Coal Co.															
Pancoast, ...	Shaft,....	Gaseous,...	Fans,....	35 20	9 4	8.5 5	53 62	2.1 1.5	Guibal, ...	Steam,.....	....	11 5	171,753 81,094	154,230 74,734	416 302
Pennsylvania Coal Co.															
No. 5 Shaft, ...	Shaft,....	Gaseous,...	Fan,.....	20	6.5	5	75	1.2	Guibal, ...	Steam,.......	....	9	144,820	95,030	187
Green Ridge Coal Co.															
Green Ridge, ...	Shaft,....	Gaseous,...	Fan,.....	14	4	4	48	2.5	Open running,..	Steam,.......	....	10	164,370	144,700	177
North End Coal Co.															
North End, ...	Tunnel,..	Non-gas....	Natural,.	......	......	......	......	......	....	....	....	4	32,800	30,100	90
A. D. and F. M. Spencer, ...															
Spencer, ...	Shaft,....	Non-gas....	Fan,.....	8	3	3	120	.7	Open running, ..	Steam,.......	....	1	17,600	15,400	11
Carney and Brown															
Carney and Brown, ...	Shaft,....	Non-gas....	Natural,.	......	......	......	......	......	....	....	....	3	33,833	26,655	63
Bull's Head Coal Co.															
Bull's Head, ...	Slope,....	Non-gas....	Natural,.	......	......	......	......	......	....	....	....	....	36,000	17,000	32
Nay Aug, ...															
Nay Aug Coal Co.	Slope,....	Non-gas....	Natural,.	......	......	......	......	......	....	....	....	....	21,600	18,000	28

NOTE.—Two non-gaseous mines, natural ventilation, not included.

TABLE 1.—Operators, location of collieries, railroads, etc.

Names of Operators and Collieries	County	Name of General Superintendent	Post Office	Name of Superintendent	Post Office	Railroad to Mine
Delaware, Lackawanna and Western Railroad Co.						
Brisbin,	Lackawanna,	R. A. Phillips,	Scranton,	Walter Reese,	Scranton,	D. L. and W.
Cayuga,						D. L. and W.
Diamond,						D. L. and W.
Manville,						D. and H.
Diamond Washery,						D. L. and W.
Delaware and Hudson Co.						
Marvine,	Lackawanna,	C. C. Rose,	Scranton,	E. R. Pettebone,	Dorranceton,	D. and H.
Legitts Creek,						
Dickson,						
Von Storch,						
Von Storch Washery,						
Scranton Coal Co.						
Pine Brook,	Lackawanna,	W. L. Allen,	Peckville,	John J. Von Bergen,	Scranton,	O. and W.
Mount Pleasant,				John F. Cummings,		
West Ridge,						
Mount Pleasant Washery,						
Price-Pancoast Coal Co.						
Pancoast,	Lackawanna,	John R. Bryden,	Scranton,	Joseph V. Birtley,	Throop,	D. L. and W. and O. and W.
Pancoast Washery,						
Green Ridge Coal Co.						
Green Ridge,	Lackawanna,	W. L. Connell,	Scranton,			Erie
Pennsylvania Coal Co.						
No. 5 Shaft,	Lackawanna,	William W. Inglis,	Dunmore,	David Girvan,	Dunmore,	Erie
North End Coal Co.						
North End,	Lackawanna,	W. L. Connell,	Scranton,			O. and W.
A. D. and F. M. Spencer						
Spencer,	Lackawanna,	H. M. Spencer,	Dunmore,			D. L. and W. and Erie
Spencer Washery,						
Carney and Brown						
Carney and Brown,	Lackawanna,	John Carney,	Dunmore,	John Clark,	Dunmore,	D. L .and W.

Economy Light, Heat and Power Co.						
Economy Washery,	Lackawanna,	George N. Tidd,	Scranton,	Adam Guhwindt,	Scranton,	
J. J. Gibbons						
Gibbons,	Lackawanna,	J. J. Gibbons,	Dunmore,			
Bull's Head Coal Co.						
Bull's Head,	Lackawanna,	David Spruks,	Scranton,	Jonathan Vipon,	Scranton,	O. and W.
Nay Aug Coal Co.						
Nay Aug, Nay Aug Washery,	Lackawanna,	William Y. Moffatt,	Scranton,			Erie
Mountain Lake Coal Co.						
Mountain Lake,	Lackawanna,	Thomas F. Quinn,	Scranton,			

TABLE 2.—Number of tons of coal mined, number of days worked, number of persons employed, number killed and injured, quantity of powder and dynamite used, etc.

Names of Operators and Collieries	County	Number of tons of coal shipped to market	Number of tons used at collieries for steam and heat	Number of tons sold to local trade and used by employes	Total production of coal in tons	Number of days worked	Number of employes	Number of fatal accidents	Number of non-fatal accidents	Number of kegs of powder used	Number of pounds of dynamite used	Number of horses and mules
Delaware, Lackawanna and Western Railroad Co.												
Brisbin,	Lackawanna,	323,079	16,060	4,517	343,656	252	731	2	3	13,414	11,031	62
Cayuga,		313,008	11,665	7,020	331,693	233	541	2	1	11,681	14,016	54
Diamond,		370,449	32,850	5,275	408,574	258	842	3	8	18,453	7,129	97
Manville,		147,938	13,352	1,642	162,932	208	511	2	6	13,844	22,225	53
		1,154,474	73,927	18,454	1,246,855	......	2,625	9	18	57,392	54,401	266
Diamond Washery,	Lackawanna,	198,130	3,000	....	201,130	......	66	......	3	9	47	4
Totals,		1,352,604	76,927	18,454	1,447,985	......	2,691	9	21	57,401	54,448	270
Delaware and Hudson Co.												
Marvine,	Lackawanna,	266,750	33,636	3,421	303,807	265	774	6	12	14,941	9,277	74
Legitts Creek,		341,081	83,822	8,015	432,918	229	911	1	10	20,431	19,830	57
Dickson,		247,560	423	4,549	252,532	263	582	7	4	15,884	20,324	55
Von Storch,		207,502	26,810	3,570	237,882	236	655	1	......	11,041	14,921	69
		1,062,893	144,691	19,555	1,227,139	......	2,922	15	26	62,297	64,352	255
Von Storch Washery,	Lackawanna,	116,803	29,364	....	146,167	......	43	......	1	....	....	......
Totals,		1,179,696	174,055	19,555	1,373,306	......	2,965	15	27	62,297	64,352	255

Scranton Coal Co.												
Pine Brook,	Lackawanna,	391,179	25,000	4,473	420,852	215	940	7	1	22,293	26,841	94
Mount Pleasant,		198,824	24,500	2,949	226,273	182	571	3	4	12,278	6,900	70
West Ridge,		38,038	8,250	1,753	48,041	124	249	......	2	3,850	8,300	29
		628,241	57,750	9,175	695,166	......	1,760	10	7	38,421	42,041	193
Mount Pleasant Washery,	Lackawanna, ...	49,251	7,000	......	56,251	......	60	......	......	......	......	......
Totals,	......	677,492	64,750	9,175	751,417	......	1,820	10	7	38,421	42,041	193
Price-Pancoast Coal Co.												
Pancoast,	Lackawanna, ...	518,754	54,750	3,960	577,464	260	1,320	5	5	30,682	16,300	116
Pancoast Washery,	Lackawanna, ...	84,693	......	......	84,693	......	42	......	......	......	......	......
Totals,	......	603,447	54,750	3,960	662,157	......	1,362	5	5	30,682	16,300	116
Pennsylvania Coal Co.												
No. 5 Shaft,	Lackawanna, ...	135,350	5,836	17,263	159,049	184	365	1	7	9,747	4,750	51
Green Ridge Coal Co.												
Green Ridge,	Lackawanna, ...	95,481	10,946	29,506	135,933	227	304	1	4	4,549	4,675	36
North End Coal Co.												
North End,	Lackawanna, ...	85,527	9,750	5,981	101,258	269	314	......	1	3,458	2,172	21
A. D. and F. M. Spencer												
Spencer,	Lackawanna, ...	19,669	......	......	19,669	56	96	......	......	540	325	20
Spencer Washery,	Lackawanna, ...	60,485	4,000	......	64,485	......	......	1	1	......	......	......
Totals,	......	80,154	4,000	......	84,154	......	96	1	1	540	325	20
Carney and Brown												
Carney and Brown,	Lackawanna, ...	40,704	263	10,426	51,393	223	102	......	......	712	1,250	20
Economy Light, Heat and Power Co.												
Economy Washery,	Lackawanna, ...	43,653	942	......	44,595	......	13	1	......	......	......	......
J. J. Gibbons												
Gibbons,	Lackawanna, ...	......	325	16,000	16,325	235	30	......	......	600	300	4
Bull's Head Coal Co.												
Bull's Head,	Lackawanna, ...	4,127	1,460	8,897	14,484	69	63	1	......	351	300	13
Nay Aug Coal Co.												
Nay Aug,	Lackawanna, ...	3,797	......	34	3,831	60	17	1	......	50	500	......
Nay Aug Washery,	Lackawanna, ...	8,454	806	......	9,260	......	10	......	......	......	......	......
Totals,	......	12,251	806	34	13,091	......	27	1	......	50	500	......

TABLE 2.—Continued

Names of Operators and Collieries	County	Number of tons of coal shipped to market	Number of tons used at collieries for steam and heat	Number of tons sold to local trade and used by employes	Total production of coal in tons	Number of days worked	Number of employes	Number of fatal accidents	Number of non-fatal accidents	Number of kegs of powder used	Number of pounds of dynamite used	Number of horses and mules
Mountain Lake Coal Co. Mountain Lake, ...	Lackawanna,...	....	....	3,580	3,580	......	22	......	......	230	....	5
Grand totals, ...	....	4,311,086	404,810	142,831	4,858,727	......	10,174	45	73	209,038	191,413	1,004

TABLE 2.—Part 2

Names of Operators	County	Number of Boilers					Locomotives			Number of steam engines of all classes	Total horse power	Number of pumps delivering water to surface	Capacity in gallons per minute	Quantity delivered to surface per minute—gallons	Number of electric dynamos	Number of air compressors
		Cylindrical	Horse power	Tubular	Horse power	Total horse power	Steam	Air	Electric							
Delaware, Lackawanna and Western Railroad Co.,	Lackawanna,	18	306	20	5,100	5,406	5	......	11	64	4,592	20	10,539	6,224	1	......
Delaware and Hudson Co.,		77	2,133	28	4,700	6,833	......	23	......	130	9,028	11	16,500	7,250	2	9
Scranton Coal Co.,		12	180	17	2,215	2,395	2	......	7	30	2,822	15	9,070	8,115	3	2
Price-Pancoast Coal Co.,		......	......	11	1,835	1,835	......	......	......	32	1,908	5	1,200	1,000	2	2
Pennsylvania Coal Co.,		......	......	3	450	450	......	......	......	17	450	2	784	252	......	......
Green Ridge Coal Co.,		......	......	3	375	375	......	......	2	12	1,432	1	450	360	1	......
North End Coal Co.,		......	......	5	500	500	......	......	3	4	225	......	......	......	1	......
A. D. and F. M. Spencer,		5	150	3	250	400	......	......	......	13	250	......	......	......	1	......
Carney and Brown,		......	......	3	195	195	......	......	......	4	115	......	......	......	......	......
Economy Light, Heat and Power Co.,		......	......	2	600	600	......	......	......	3	40	......	......	......	......	......
J. J. Gibbons,		1	50	......	......	50	......	......	......	1	50	......	......	......	......	......
Bull's Head Coal Co.,		3	52	......	......	52	......	......	......	5	137	......	......	......	1	......
Nay Aug Coal Co.,		......	......	3	225	225	......	......	......	6	218	......	......	......	......	......
Totals,	......	116	2,871	98	16,445	19,316	7	23	23	321	21,267	54	38,543	23,201	12	13

Table 3.—Number of each class of employes inside and outside of mines

Names of Operators and Collieries	County	Inside											Outside									Grand total inside and outside
		Mine foremen	Assistant mine foremen	Fire bosses and assistants	Miners	Miners' laborers	Drivers and runners	Doorboys and helpers	Pumpmen	Company men	All other employes	Total inside	Superintendents	Foremen	Blacksmiths and carpenters	Engineers and firemen	Slate pickers (boys)	Slate pickers (men)	Bookkeepers and clerks	All other employes	Total outside	
Delaware, Lackawanna and Western Railroad Co.																						
Brisbin,	Lackawanna,	2	....	5	188	234	57	18	3	.....	94	601	....	1	7	9	41	....	3	69	130	731
Cayuga,		1	1	4	150	138	63	14	2	70	.....	443	....	1	7	12	30	....	4	44	98	541
Diamond,		3	....	5	205	255	82	11	3	95	.....	659	....	2	10	15	15	42	2	97	183	842
Manville,		1	....	5	144	144	56	14	2	51	.....	417	....	1	5	14	10	26	2	36	94	511
		7	1	19	687	771	258	57	10	216	94	2,120	...	5	29	50	96	68	11	246	505	2,625
Diamond Washery,	Lackawanna,	1	....	...	1	......	......	......	1	......	5	8	1	1	2	6	4	...	2	42	58	66
Totals,		8	1	19	688	771	258	57	11	216	99	2,128	1	6	31	56	100	68	13	288	563	2,691
Delaware and Hudson Co.																						
Marvine,	Lackawanna,	2	....	8	195	170	111	15	4	104	21	630	....	1	8	24	25	23	3	60	144	774
Legitts Creek,		2	....	7	253	253	71	11	6	101	17	721	....	2	11	36	28	14	4	95	190	911
Dickson,		1	1	5	155	155	64	13	2	76	21	493	....	1	7	13	12	7	3	46	89	582
Von Storch,		1	1	5	182	150	91	14	2	71	11	528	....	1	11	21	31	11	4	48	127	655
		6	2	25	785	728	337	53	14	352	70	2,372	....	5	37	94	96	55	14	249	550	2,922
Von Storch Washery,	Lackawanna,	....	....	...	.....	......	......	......	......	......	.....	......	...	1	...	1	6	5	...	30	43	43
Totals,		6	2	25	785	728	337	53	14	352	70	2,372	...	6	37	95	102	60	14	279	593	2,965

Scranton Coal Co																					
Pine Brook,	Lackawanna,	1	1	6	252	210	132	35	7	24	73	741	1	1	11	11	62	49	2	62	199	940
Mount Pleasant,		2	....	3	137	120	90	16	7	......	58	433	1	1	8	12	48	24	2	42	138	571
West Ridge,		1	....	2	68	50	20	3	2	......	35	181	1	1	4	4	28	5	1	24	68	249
		4	1	11	457	380	242	54	16	24	166	1,355	3	3	23	27	138	78	5	128	405	1,760
Mount Pleasant Washery,	Lackawanna,..	....	....	....	......	......	......	......	......	......	......	......	1	1	2	6	5	5	...	40	60	60
Totals,		4	1	11	457	380	242	54	16	24	166	1,355	4	4	25	33	143	83	5	168	465	1,820
Price-Pancoast Coal Co.																					
Pancoast,	Lackawanna,...	2	3	7	330	346	154	62	8	37	144	1,093	1	1	10	20	40	42	4	109	227	1,320
Pancoast Washery,	Lackawanna,...	....	....	....	......	......	......	......	......	......	......	......	....	1	2	1	...	4	...	34	42	42
Totals,		2	3	7	330	346	154	62	8	37	144	1,093	1	2	12	21	40	46	4	143	269	1,362
Pennsylvania Coal Co.																					
No. 5 Shaft,	Lackawanna,...	1	2	1	93	102	50	8	2	11	14	284	....	1	4	5	19	17	2	33	81	365
Green Ridge Coal Co.																					
Green Ridge,	Lackawanna,...	2	....	1	70	75	46	7	3	12	6	222	1	1	6	12	15	....	3	44	82	304
North End Coal Co.																					
North End,	Lackawanna,...	1	....	3	59	65	23	2	......	1	79	233	....	1	4	8	27	5	3	33	81	314
A. D. and F. M. Spencer																					
Spencer, Spencer Washery,	Lackawanna,.	1	...	...	15	15	12	.....	2	4	......	49	1	1	2	4	8	2	1	28	47	96
Totals,		1	...	...	15	15	12	.....	2	4	......	49	1	1	2	4	8	2	1	28	47	96
Carney and Brown																					
Carney and Brown,	Lackawanna,..	1	1	....	17	17	16	2	......	8	4	66	1	....	2	2	12	3	1	15	36	102
Economy Light, Heat and Power Co.																					
Economy Washery,	Lackawanna,...	....	....	....	......	......	......	......	......	......	......	......	....	1	...	2	....	....	....	10	13	13
J. J. Gibbons																					
Gibbons,	Lackawanna,...	1	....	....	6	6	3	......	......	2	......	18	1	....	1	1	4	1	1	3	12	30
Bull's Head Coal Co.																					
Bull's Head,	Lackawanna,...	1	....	....	16	11	8	......	......	9	......	45	....	1	1	2	6	....	1	7	18	63
Nay Aug Coal Co.																					
Nay Aug, Nay Aug Washery,	Lackawanna,..	1	1	....	......	......	3	......	......	10	.....	15	1	....	1	1	3	....	1	5	12	27
Mountain Lake Coal Co.																					
Mountain Lake,	Lackawanna,...	1	....	....	4	4	4	......	......	1	.....	14	....	....	....	1	4	....	1	2	8	22
Grand totals,		30	11	67	2,540	2,520	1,156	245	56	687	582	7,894	11	24	126	243	483	285	50	1,058	2,280	10,174

TABLE 3.—Part 2

Names of Operators and Collieries	County	Number of Days Worked in Breaker												
		January	February	March	April	May	June	July	August	September	October	November	December	Total
Delaware, Lackawanna and Western Railroad Co.														
Brisbin,	Lackawanna,	23	19	22	20	21	21	22	21	18	22	22	21	252
Cayuga,		20	18	20	20	20	20	20	21	17	20	19	18	233
Diamond,		22	20	22	21	23	22	22	23	22	22	19	20	258
Manville,		18	19	19	20	19	19	21	22	21	11	....	19	208
Delaware and Hudson Co.														
Marvine,	Lackawanna,	22	21	21	24	24	20	23	20	21	24	23	22	265
Legitts Creek,		20	17	18	12	21	19	21	18	19	20	22	22	229
Dickson,		20	22	20	24	23	21	22	22	22	23	22	22	263
Von Storch,		18	18	18	20	20	19	20	21	20	21	21	20	236
Scranton Coal Co.														
Pine Brook,	Lackawanna,	19	17	18	18	18	19	17	17	17	19	18	18	215
Mount Pleasant,		15	14	15	15	17	16	15	16	14	16	14	15	182
West Ridge,		10	10	11	10	10	10	11	10	9	9	12	12	124
Price-Pancoast Coal Co.														
Pancoast,	Lackawanna,	23	21	23	20	18	22	22	23	22	23	22	21	260
Pennsylvania Coal Co.														
No. 5 Shaft,	Lackawanna,	18	17	19	18	18	17	17	17	16	8	4	15	184
Green Ridge Coal Co.														
Green Ridge,	Lackawanna,	21	21	22	21	19	15	16	18	18	20	18	18	227
North End Coal Co.														
North End,	Lackawanna,	23	23	20	24	21	25	25	23	22	22	21	20	269
A. D. and F. M. Spencer														
Spencer,	Lackawanna,	6	8	4	5	5	5	4	5	4	4	6	....	56

Carney and Brown,	Carney and Brown	Lackawanna,	21	20	20	21	21	8	20	14	19	21	19	19	223
Gibbons,	J. J. Gibbons	Lackawanna,	19	19	19	19	19	19	19	19	19	19	25	20	235
Bull's Head,	Bull's Head Coal Co.	Lackawanna,	5	5	6	6	5	6	5	4	4	7	9	7	69
Nay Aug,*	Nay Aug Coal Co.	Lackawanna,	....	....	....	....	....	....	....	....	....	....	....	....	60
Mountain Lake,	Mountain Lake Coal Co.	Lackawanna,	22	21	18	11	10	7	....	14	20	26	23	21	193

*Days worked each month not reported; mine changed hands.

TABLE 4.—Fatal accidents inside and outside of mines

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Number of widows	Number of orphans	Name of Mine	County	Nature and Cause of Accident in Brief
Jan.	10	Phillip Rees,	Welsh,	Laborer,	24	S.	....	....	Dickson,	Lackawanna,	Killed by cars while helping the runner.
	22	Frank Sakewick,	Russian,	Miner,	48	M.	1	2	Bull's Head,		Instantly killed by fall at face of working place.
	30	Sam Blo,	Italian,	Laborer,	35	M.	1	3	No. 5 Shaft,		Killed by blast he fired in the absence of the miner.
Feb.	2	William Krugguski,	Polish,	Doorboy,	16	S.	....	....	Pancoast,		Fatally injured by cars in the Dunmore vein.
	13	Steven Hintle,	Polish,	Company man,	35	M.	1	....	Economy Washery,		Struck by chain while helping to lift elevator buckets.
	20	David Jones,	Welsh,	Timberman,	40	S.	....	....	Brisbin,		Fell into shaft while examining it for ice.
	25	Nicholas Jerkai,	Hungarian,	Laborer,	26	S.	....	....	Pancoast,		Killed by fall of rock at face of gangway.
April	4	Joseph Cavage,	Lithuanian,	Miner,	38	S.	....	....	Marvine,		Killed by fall of roof at face of chamber.
	11	William Barr,	Scotch,	Miner,	39	M.	1	2	Dickson,		Instantly killed by fall of roof rock at face of chamber.
	17	James Brennan,	Irish,	Miner,	30	M.	1	5	Pine Brook,		Instantly killed by blast at face of chamber.
	22	Walter Vekesky,	Polish,	Laborer,	25	S.	....	....	Pancoast,		Fatally burned by explosion of powder.
May	1	James Cook,	Irish,	Rockman,	43	M.	1	1	Tripp Slope,		Killed at face of rock tunnel by fall of roof.
	2	David Parker,	American,	Footman,	26	M.	1	....	Dickson,		Crushed between cars at foot of main shaft.
	4	Frank Sincavage,	Lithuanian,	Miner,	35	M.	1	1	Mount Pleasant,		Killed at face of chamber by fall of rock.
	14	Joseph Gelenski,	Polish,	Laborer,	35	M.	1	2	Manville,		Killed at face of chamber by fall of rock.
	16	John Shult,	Polish,	Laborer,	34	M.	1	3	Pine Brook,		Killed at face of chamber by fall of rock.
	24	Frank Tukshosh,	Hungarian,	Laborer,	38	M.	1	2	Pancoast,		Killed at face of chamber by fall of roof.
June	14	Frank Karboski,	Russian,	Miner,	36	M.	1	5	Marvine,		Killed by flying coal from blast.
	22	John Richerson,	American,	Laborer,	33	S.	....	....	Pine Brook,		Fatally injured by fall of roof at face of working place.
	27	John Timlin,	Irish,	Miner,	56	M.	1	....	Dickson,		Killed by fall of roof rock at face of gangway.
July	2	John J. Kelly,	American,	Tracklayer,	38	M.	1	3	Marvine,		Killed by being struck by a runaway car.
	8	Mat. Bongonis,	Polish,	Laborer,	20	S.	....	....	Pine Brook,		Fatally injured by fall of roof at face of chamber No. 1 Dunmore vein.

July	15	Jacob Kowalski,	Polish,	Miner,	36	M.	1	2	Manville,	Lackawanna,	Killed by explosion of dynamite while tamping the charge.
	15	Felix Sovenski,	Polish,	Laborer,	23	S.	....	....	Mount Pleasant,		Killed by fall of roof while helping miner to re-stand discharged props.
	29	John Newton,	English,	Driver boss,	27	M.	1	1	Pine Brook,		Killed in collision of mine cars on inside plane.
Aug.	13	Steve Hourva,	Slavonian,	Laborer,	41	M.	1	3	Green Ridge,		Killed by a blast he fired in the absence of his miner.
	17	David Smith,	Welsh,	Laborer,	42	S.	....	....	Cayuga,		Instantly killed by fall of roof at face of gangway.
Sept.	3	Michael Kalwoski,	Polish,	Laborer,	20	S.	....	....	Marvine,		Killed by fall of roof at face of chamber in 14-Foot vein.
	23	Coster Rosick,	Polish,	Laborer,	35	M.	1	....	Pine Brook,		Killed by flying coal from a blast.
	25	Peter Coss,	American,	Carpenter,	50	M.	1	1	Nay Aug Breaker,		Killed by falling from top of breaker in course of construction.
Oct.	4	Charles Fefesci,	Polish,	Laborer,	35	S.	....	....	Legitts Creek,		Killed by the fall that followed the removal of props.
	5	C. V. Hallstead,	American,	Engineer,	63	M.	1	....	Brisbin,		Instantly killed by coming in contact with electric machinery in motion.
	11	Joseph Kechas,	Lithuanian,	Laborer,	23	S.	....	....	Dickson,		Killed by flying coal from a blast fired in a cross-cut.
	16	Charles Shafer,	American,	Laborer,	30	S.	....	....	Spencer Breaker,		Killed in conveyor line at base of culm dump.
	18	Frank Zonblozki,	Lithuanian,	Doorboy,	16	S.	....	....	Marvine,		Fatally burned by clothes catching fire from his lamp.
	19	Frank Karpowick,	Polish,	Miner,	50	M.	1	5	Von Storch,		Instantly killed by fall of roof at face of chamber.
Nov.	6	Frank Pozonofski,	Polish,	Miner,	34	M.	1	....	Pancoast,		Instantly killed by fall of roof at face in Diamond vein.
	6	Joe Mochi,	Slavonian,	Miner,	26	M.	1	....	Pine Brook,		Fatally injured by fall of roof at face of working place.
	11	Thomas Moore,	Irish,	Doorman,	60	S.	....	....	Marvine,		Fatally injured by cars in China vein.
	14	John Gizler,	Polish,	Miner,	45	M.	1	5	Dickson,		Instantly killed by fall of rock at face of chamber.
	20	Arthur Green,	English,	Miner,	32	M.	1	6	Dickson,		Instantly killed by fall of rock at face of chamber.
Dec.	17	Joseph Gieski,	Polish,	Driver,	18	S.	....	....	Mount Pleasant,		Fatally injured by a kick from a mule.
	18	Michael Noone,	Irish,	Driver,	18	S.	....	....	Cayuga,		Instantly killed by fall of rock in a gangway in the Surface vein.
	28	Owen Cox,	Welsh,	Miner,	44	M.	1	5	Diamond Shaft,		Killed by explosion of dynamite. The miner was in the act of tamping when the charge exploded.
	28	Joseph Matelvoitch,	Lithuanian,	Laborer,	28	S.	....	....	Diamond Shaft,		

TABLE 5.—Non-fatal accidents inside and outside of mines

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Name of Mine	County	Nature and Cause of Accident in Brief
Jan.	3	Louis Gross,	Hungarian,	Miner,	33	M.	Pancoast,	Lackawanna,	Leg fractured by falling roof rock at face.
	7	Patrick Naughton,	Irish,	Company man,	50	M.	Legitts Creek,		Injured by coming in contact with pumps.
	7	Peter Smith,	Scotch,	Miner,	46	M.	Marvine,		Injured by premature blast at face.
	10	Stanley Vail,	Polish,	Miner,	36	M.	Marvine,		Leg fractured by fall of rock at the face.
	12	John Ketlefski,	Lithuanian,	Laborer,	21	S.	Marvine,		Run over while blocking an empty car.
	14	Mike Cuchak,	Slavonian,	Miner,	37	M.	Green Ridge,		Injured by fall of roof at the face.
	14	Charles Regan,	Slavonian,	Laborer,	29	M.			
	14	Sydney Beemer,	American,	Company man,	22	S.	Manville,		Leg crushed in conveyor line. Outside.
	19	William Ace,	American,	Driver,	17	S.	Diamond Shaft,		Injured by falling under moving mine cars.
	30	Ross Perill,	Italian,	Miner,	42	M.	No. 5 Shaft,		Injured by blast fired by laborer in an adjoining place.
Feb.	5	Michael Loitnick,	Polish,	Miner,	40	M.	Legitts Creek,		Severely injured by flying coal from blast at the face.
	7	Andrew Benzavith,	Lithuanian,	Laborer,	39	M.	Diamond Shaft,		Collar bone broken by a derailed mine car.
	15	Joseph Gustitus,	Lithuanian,	Miner,	36	M.	Dickson,		Painfully injured by flying coal from blast at the face.
	15	Daniel Thomas,	Welsh,	Fire boss,	61	S.	Diamond,		Burned on hands and face by an explosion of gas.
	15	Richard Morgan,	American,	Miner,	41	M.			
	15	Alfred Joseph,	American,	Miner,	39	M.			
	20	Charles Regan,	Slavonian,	Laborer,	46	M.	Green Ridge,		Leg fractured by derailed mine car at branch.
March	4	John Polosky,	Polish,	Laborer,	25	S.	Diamond Washery,		Foot lacerated by railroad cars. Outside.
	20	Thomas Young,	American,	Miner,	42	M.	Legitts Creek,		Hip dislocated by fall of roof at face of chamber.
April	4	Joseph Barnosky,	Lithuanian,	Driver,	17	S.	Manville,		Foot injured by cars.
	8	Paul Gryzogiski,	Russian,	Miner,	27	M.	No. 5 Shaft,		Leg fractured by flying coal from blast.
	16	Fred Colonna,	Italian,	Miner,	30	S.	Manville,		Hands and face injured by explosion of powder.
May	7	Anthony Stanikivitz,	Lithuanian,	Laborer,	18	S.	Diamond Drift,		Toe crushed by cars at face of chamber.
	7	Peter Ogganey,	Italian,	Miner,	35	S.	Spencer,		Slightly injured by fall of rock at face of working place.
	17	Thomas Thomas,	Welsh,	Laborer,	34	M.	Legitts Creek,		Seriously injured by a derailed car.
	18	Vincent Ango,	Slavonian,	Driver,	17	S.	Green Ridge Slope,		Injured by falling off mule's back. Outside.

May	24	Thomas Amstead,	American,	Doorboy,	16	S.	Mount Pleasant,	Lackawanna,	Squeezed between door and passing car.
	29	Joe Ross,	Italian,	Driver,	21	S.	West Ridge,		Slightly injured by derailed cars.
June	3	Frank Plaska,	Polish,	Company man,	30	M.	Diamond Breaker,		Leg injured by a prop rolling on him. Outside.
	15	Frank A. Flood,	American,	Runner,	19	S.	Legitts Creek,		Leg injured by cars.
	22	Charles Black,	Polish,	Laborer,	46	M.	Marvine,		Seriously injured by cars in 14-Foot vein.
	25	Gicano Dunio,	Italian,	Miner,	40	M.	No. 5 Shaft,		Three fingers cut off by fall of roof at face.
	26	Stephen Gursky,	Polish,	Miner,	40	M.	Mount Pleasant,		Hands and face burned by explosion of gas at face.
	29	Michael Ruddis,	Lithuanian,	Miner,	42	M.	Diamond Drift,		Leg fractured by fall of roof at face.
July	15	Gustave Maunchatt,	German,	Laborer,	24	S.	Manville,		Injured by explosion of dynamite.
	11	Stephen Mlynae,	Russian,	Miner,	39	S.	Dickson,		Leg fractured by fall of roof at face of chamber.
	20	James Husoan,	American,	Carpenter,	22	S.	Diamond Washery,		
	20	James Bailey,	American,	Carpenter,	40	M.			Injured by falling timber while repairing the washery.
	25	Antonio Bell,	Italian,	Laborer,	27	S.	No. 5 Shaft,		Leg fractured by cars.
Aug.	1	Michael McGuire,	American,	Asst. Foreman,	50	S.	North End,		Leg fractured by cars.
	21	Andrew Willingtange,	Russian,	Laborer,	29	S.	West Ridge,		Slightly burned on arm by explosion of gas at face.
	26	Joseph Coggery,	Irish,	Driver,	18	S.	Manville,		Arm broken in a collision of mine cars.
	27	John Sekasky,	Slavonian,	Miner,	45	M.	Manville,		Injured by fall of roof rock at face of chamber.
Sept.	7	William Grier,	Irish,	Driver,	16	S.	No. 5 Shaft,		Three fingers cut off by cars.
	12	Peter Schneider,	German,	Laborer,	47	M.	No. 5 Shaft,		Two ribs broken by cars.
	12	John Norkitis,	Polish,	Laborer,	33	S.	Mount Pleasant,		Severely injured by fall of rock at face.
	12	John Ferok,	Polish,	Laborer,	37	M.	Marvine,		Leg broken by fall of rock at face.
	16	Martin A. Nolan,	American,	Brakeman,	18	S.	Legitts Creek,		Foot injured by motor jumping the track.
	21	John Kelly,	Irish,	Miner,	29	M.	No. 5 Shaft,		Collar bone broken while driving a team of mules.
Oct.	4	Lawrence Moran,	American,	Runner,	18	S.	Brisbin,		Hip joint fractured by fall of roof at opening of chamber on gangway.
	9	Joe Trodofski,	Polish,	Miner,	26	M.	Pancoast,		Seriously injured by fall of roof at the face
	17	John Tigue,	Irish,	Miner,	28	M.	Legitts Creek,		Leg fractured by fall of roof in chamber.
	17	Joseph Kumrathe,	Italian,	Runner,	20	S.	Pancoast,		Leg fractured by cars.
	23	Peter Sali,	Austrian,	Miner,	31	M.	Brisbin,		Seriously injured by fall of roof, the result of chopping props.
	26	Thomas Brennan,	American,	Driver,	16	S.	Marvine,		Jaw bone fractured by kick from a mule.
	31	John Smith,	American,	Motor brakeman,	18	S.	Legitts Creek,		Injured by mine cars.
Nov.	5	Oscar D. Blackmore,	American,	Laborer,	38	M.	Marvine,		Leg injured between the bumpers of mine cars.
	12	Dominick Pohowsky,	Lithuanian,	Laborer,	20	S.	Dickson,		Thigh bone fractured by cars.
	18	James Morgan,	American,	Tracklayer,	27	M.	Dickson,		Slightly injured by explosion of gas in old workings.
	20	John Davies,	American,	Tracklayer,	32	M.	Brisbin,		Slightly injured by fall of roof on main road.
	23	Thomas Smith,	American,	Driver,	16	S.	Marvine,		Injured by falling under moving cars.
	23	Richard Atkinson,	English,	Runner,	20	M.	Marvine,		Injured between cars in 14-Foot vein.
	29	Michael Bunsick,	Polish,	Laborer,	25	S.	Cayuga,		Injured by cars.
Dec.	3	Anthony Shinoch,	Polish,	Laborer,	21	S.	Pancoast,		Leg fractured by flying coal from a blast.
	4	Edward Krotchus,	Polish,	Runner,	18	S.	Legitts Creek,		Leg fractured by falling off the bumper of a moving car.

TABLE 5.—Continued

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Name of Mine	County	Nature and Cause of Accident in Brief
Dec.	12	George Micks,	Russian,	Laborer,	29	M.	Legitts Creek,	Lackawanna,	Leg fractured by flying coal from a blast.
	13	Anthony Jackson,	Polish,	Doorboy,	17	S.	Mount Pleasant,		Arm fractured by kick from a mule.
	16	H. M. Barrett,	American,	Miner,	32	M.	Marvine,		Foot injured while loading timber on truck.
	23	Adam Petrowicki,	Lithuanian,	Laborer,	21	S.	Marvine,		Leg fractured by fall of roof at face.
	23	John J. Salmon,	American,	Engineer,	44	M.	Legitts Creek Washery,		Injured by falling off trestle.
	24	John Moley,	Irish,	Miner,	47	M.	Marvine,		Hand injured by fall of rock at face.
	28	Steve McCormack,	American,	Driver,	21	S.	Pine Brook,		Seriously injured by cars at foot of inside plane.
	31	Andrew Talain,	Austrian,	Doorman,	55	M.	Pancoast,		Leg fractured by cars on main road.

CONDITION OF COLLIERIES

DELAWARE, LACKAWANNA AND WESTERN RAILROAD COMPANY

Brisbin.—Ventilation, roads and drainage good. Condition as to safety good.

Cayuga.—Ventilation, roads and drainage good. Condition as to safety good.

Diamond Shaft.—Ventilation, roads and drainage good. Condition as to safety good.

Diamond Drift.—Ventilation, roads and drainage fair. Condition as to safety good.

Tripp Shaft.—Ventilation, roads and drainage good. Condition as to safety good.

Tripp Slope.—Ventilation, roads and drainage good. Condition as to safety good.

Manville.—Ventilation, roads and drainage good. Condition as to safety good.

DELAWARE AND HUDSON COMPANY

Marvine Shaft and Slope.—Ventilation, roads and drainage good. Condition as to safety good.

Legitts Creek, Nos. 1, 2 and 3.—Ventilation, roads and drainage good. Condition as to safety good.

Dickson.—Ventilation, roads and drainage good. Condition as to safety good.

Von Storch.—Ventilation, roads and drainage good. Condition as to safety good.

SCRANTON COAL COMPANY

Pine Brook.—Ventilation, roads and drainage good. Condition as to safety good.

Mount Pleasant.—Ventilation, roads and drainage good. Condition as to safety good.

West Ridge.—Ventilation, roads and drainage good. Condition as to safety good.

PRICE-PANCOAST COAL COMPANY

Pancoast.—Ventilation, roads and drainage good. Condition as to safety good.

PENNSYLVANIA COAL COMPANY

No. 5 Shaft.—Ventilation, roads and drainage good. Condition as to safety good.

GREEN RIDGE COAL COMPANY

Green Ridge.—Ventilation, roads and drainage good. Condition as to safety good.

NORTH END COAL COMPANY

North End.—Ventilation, roads and drainage good. Condition as to safety good.

A. D. AND F. M. SPENCER

Spencer.—Ventilation, roads and drainage good. Condition as to safety good.

CARNEY AND BROWN

Carney and Brown.—Ventilation, roads and drainage good. Condition as to safety good.

J. J. GIBBONS

Gibbons.—Ventilation, roads and drainage good. Condition as to safety good.

BULL'S HEAD COAL COMPANY

Bull's Head.—Ventilation, roads and drainage good. Condition as to safety good.

NAY AUG COAL COMPANY

Nay Aug.—Ventilation, roads and drainage good. Condition as to safety good.

MOUNTAIN LAKE COAL COMPANY

Mountain Lake.—Ventilation, roads and drainage good. Condition as to safety good.

IMPROVEMENTS

DELAWARE, LACKAWANNA AND WESTERN RAILROAD COMPANY

New breaker at the Diamond was built and was in operation for a few days the latter part of year. Abandoned Tripp Slope and concentrated all of the work at Tripp Shaft. Built an addition to the boiler plant at the Manville mine.

DELAWARE AND HUDSON COMPANY

Legitts Creek.—Rock Plane driven from 5 foot vein to surface for second opening. Installation of 16 inch x 48 inch compound Duplex Jeansville pump in Clark vein. Lining of 20 inch water hole necessitated by settling of the strata through which hole was bored. Securing the roadways and sump in Clark vein, by substituting I beams in place of timber which had broken down.

Dickson.—Engine plane in Clark vein extended.

Von Storch.—6 inch hole driven from 14 foot vein to Clark vein for drainage.

PRICE-PANCOAST COAL COMPANY

Pancoast.—The tail rope system has been extended 1,000 feet into the workings of the Dunmore vein.

A new slope 400 feet long has been driven in the Dunmore vein, and at the present time a tunnel is in course of construction.

Another slope has been driven over the anticlinal in the Diamond vein and a pair of 12 inch x 12 inch hoisting engines installed.

A new shaft 10 feet x 14 feet for ventilating purposes and a new Guibal fan installed.

The mine ambulance has been fitted with heating apparatus for the comfort of the injured.

PENNSYLVANIA COAL COMPANY

No. 5 Shaft.—Concrete cribbing has been put in the shaft from the rock to the surface, also a new brick fan drift with concrete roof. Work has been started on a new brick building 36 feet x 46 feet, for an electric power plant, also new brick building 21 feet x 38 feet for shaft engine house started. New concrete foundation and new bed plates have been put under the shaft engines.

MINE FOREMEN'S EXAMINATIONS

The annual examination of applicants for certificates of qualification as Mine Foremen and Assistant Mine Foremen was held in the City Hall, Scranton, May 13 and 14. The Board of Examiners was composed of the following members: H. O. Prytherch, Inspector, Scranton; John Corcoran, Superintendent, Rendham; T. F. McNally, miner, Old Forge; and John D. Griffiths, miner, Scranton.

The following persons passed a successful examination and were granted certificates:

Mine Foremen

Reese Lloyd, Scranton; David J. Davies, Scranton; Walter G. Hughes, Scranton; Arthur C. Dale, Scranton; Michael Ford, Rendham; James D. Robinson, Coyne; John R. James, Scranton; Edward J. Garvin, Rendham; John McGinley, Rendham.

Assistant Mine Foremen

Eli Morgans, Scranton; Walter Jones, Scranton; John J. McHugh, Scranton; Edward W. Morgan, Scranton; N. J. Cunningham, Scranton; Andrew Meixner, Scranton.

Fourth District

LACKAWANNA COUNTY

Scranton, Pa., March 10, 1908.

Hon. James E. Roderick, Chief of Department of Mines:

Sir: I have the honor to transmit herewith my report as Inspector of Mines of the Fourth Anthracite District for the year ending December 31, 1907.

Respectfully submitted,

D. T. WILLIAMS,

Inspector.

SUMMARY OF STATISTICS

Number of collieries,	15
Number of mines,	29
Number of mines in operation,	29
Number of tons of coal shipped to market,	5,323,703
Number of tons used at mines for steam and heat,	151,956
Number of tons sold to local trade and used by employes,	161,111
Number of tons produced,	5,636,770
Number of tons produced by compressed air machines,	—
Number of tons produced by electrical machines,	—
Number of persons employed inside of mines,	7,537
Number of persons employed outside,	2,513
Number of fatal accidents inside of mines,	49
Number of fatal accidents outside,	8
Number of non-fatal accidents inside of mines,	46
Number of non-fatal accidents outside,	6
Number of tons of coal produced per fatal accident inside,	115,036
Number of persons employed per fatal accident inside,	154
Number of persons employed per fatal accident outside,	314
Number of persons employed per non-fatal accident inside	164
Number of persons employed per non-fatal accident outside,	419
Number of wives made widows,	33
Number of children orphaned,	83
Number of steam locomotives used outside,	12
Number of electric motors used inside,	66
Number of fans in use,	23
Number of gaseous mines in operation,	19
Number of non-gaseous mines in operation,	10
Number of new mines opened,	2

TABLE A

PRODUCTION OF COAL

Names of Operators	Tons
Delaware, Lackawanna and Western Railroad Company,	4,787,733
Delaware and Hudson Company,	305,611
Scranton Coal Company,	262,793
People's Coal Company,	217,956
Marian Coal Company,	62,126
Minooka Coal Company,	551
Total,	5,636,770

Production by Counties

Lackawanna,	5,636,770

TABLE B.—Fatal and non-fatal accidents inside and outside of mines; number of tons of coal produced per accident; number of persons employed; number employed per accident

Names of Operators	Fatal Accidents			Non-fatal Accidents			Tons of coal produced per fatal accident inside	Tons of coal produced, per non-fatal accident inside	Number of employes inside	Number of employes outside	Total number of employes	Number of employes inside per fatal accident	Number of employes outside per fatal accident	Number of employes inside per non-fatal accident	Number of employes outside per non-fatal accident
	Inside	Outside	Total	Inside	Outside	Total									
Delaware, Lackawanna and Western Railroad Co.,	38	4	42	35	3	38	125,993	136,792	6,150	1,933	8,083	162	483	176	644
Delaware and Hudson Co.,	2	4	6	5	2	7	152,805	61,122	655	248	903	327	62	131	124
Scranton Coal Co.,	2	....	2	3	....	3	131,396	87,598	451	185	636	225	....	150	....
People's Coal Co.,	7	....	7	3	1	4	31,137	72,652	278	114	392	39	....	93	114
Miscellaneous companies,	....	....	....	....	....	....	....	....	3	33	36	....	....	....	....
Totals and averages for district,	49	8	57	46	6	52	115,036	122,538	7,537	2,513	10,050	154	314	164	419

TABLE C.—Classification of Fatal Accidents Inside and Outside of Mines

	Months													
	January	February	March	April	May	June	July	August	September	October	November	December	Totals	Percentages
Causes of Accidents Inside														
Falls of coal,	...	....	...	2	...	....	2	...	....	....	....	....	4	8.16
Falls of roof,	4	3	...	1	1	2	....	1	....	1	3	2	18	36.73
Mine cars,	1	....	4	2	....	....	1	1	....	....	....	1	10	20.41
Explosions of gas and dust,	....	....	7	...	....	....	....	...	....	....	....	....	7	14.29
Premature blasts,	...	....	2	1	2	1	....	...	1	....	....	....	7	14.29
Falling into shafts,	....	....	...	...	....	1	....	...	....	....	....	....	1	2.04
Mules,	....	1	...	...	....	....	....	...	1	....	....	....	2	4.08
Totals,	5	4	13	6	3	4	3	2	2	1	3	3	49	100.00
Causes of Accidents Outside														
Cars,	....	....	....	....	....	1	....	...	....	....	1	....	2	25.00
Machinery,	....	....	...	....	1	....	....	...	....	....	2	....	3	37.50
Boiler explosions,	....	....	...	....	....	....	....	...	....	....	....	1	1	12.50
Miscellaneous,	....	1	...	...	....	....	....	...	....	....	....	1	2	25.00
Totals,	....	1	....	....	1	1	....	...	....	....	3	2	8	100.00
Grand totals inside and outside,	5	5	13	6	4	5	3	2	2	1	6	5	57	....

TABLE D.—Classification of Non-fatal Accidents Inside and Outside of Mines

	Months													
	January	February	March	April	May	June	July	August	September	October	November	December	Totals	Percentages
Causes of Accidents Inside														
Falls of coal,	....	1	1	...	1	1	....	....	1	....	....	....	5	10.87
Falls of roof,	3	....	2	....	1	....	....	1	....	2	....	2	11	23.92
Mine cars,	....	....	2	1	1	....	1	2	....	....	....	1	8	17.39
Explosions of gas and dust,	....	....	3	....	....	....	....	....	....	....	....	1	4	8.69
Explosions of powder and dynamite,	....	....	....	1	....	....	1	....	....	....	....	....	2	4.35
Premature blasts,	1	2	....	3	....	....	....	....	....	....	1	1	8	17.39
Mules,	....	....	....	....	2	....	....	1	....	....	....	....	3	6.52
Miscellaneous,	1	2	....	1	....	....	1	....	....	....	....	....	5	10.87
Totals,	5	5	8	6	5	1	3	4	1	2	1	5	46	100.00
Causes of Accidents Outside														
Cars,	....	....	....	....	....	....	....	....	1	....	....	1	2	33.34
Boiler explosions,	....	....	....	....	....	....	....	....	....	....	....	1	1	16.66
Miscellaneous,	....	1	....	...	1	....	1	....	....	....	....	....	3	50.00
Totals,	....	1	....	....	1	....	1	....	1	....	....	2	6	100.00
Grand totals inside and outside.	5	6	8	6	6	1	4	4	2	2	1	7	52	....

TABLE E.—Occupations of Persons Killed or Fatally Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Inside													
Miners,	2	2	5	2	2	3	1	1	1	...	2	1	22
Miners' laborers,	2	1	5	2	1	1	1	....	....	1	1	1	16
Drivers and runners,	....	1	1	1	....	....	....	....	1	....	...	1	5
Doorboys and helpers,	1	....	...	...	....	....	...	1	....	...	...	...	2
Company men,	....	....	1	...	....	...	1	....	...	...	...	...	2
All other employes,	....	...	1	1	....	....	...	....	....	...	...	...	2
Totals,	5	4	13	6	3	4	3	2	2	1	3	3	49
Outside													
Slatepickers (boys),	...	...	...	...	....	....	....	....	....	...	1	....	1
All other employes,	....	1	...	...	1	1	....	....	....	....	2	2	7
Totals,	....	1	...	...	1	1	....	....	....	....	3	2	8
Grand totals inside and outside,	5	5	13	6	4	5	3	2	2	1	6	5	57

TABLE F.—Occupations of Persons Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Inside													
Miners,	3	3	2	2	1	....	....	....	....	2	...	2	15
Miners' laborers,	1	....	1	1	....	1	1	1	1	....	1	2	10
Drivers and runners,	....	....	1	2	3	....	2	1	....	....	....	...	9
Doorboys and helpers,	....	....	2	...	....	....	....	2	....	...	....	...	4
Company men,	1	1	1	1	1	....	....	....	....	...	....	1	6
All other employes,	....	1	1	....	....	....	....	....	....	....	....	....	2
Totals,	5	5	8	6	5	1	3	4	1	2	1	5	46
Outside													
Engineers and firemen,	....	....	...	....	....	....	....	....	....	....	....	1	1
Slatepickers(boys)	....	...	...	....	1	....	....	....	1	...	....	....	2
All other employes,	....	1	...	....	....	....	1	....	....	....	....	1	3
Totals,	....	1	...	....	1	....	1	....	1	....	....	2	6
Grand totals inside and outside,	5	6	8	6	6	1	4	4	2	2	1	7	52

TABLE G.—Nationality of Persons Killed or Fatally Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
American,	....	1	1	2	....	....	....	....	....	....	1	1	6
Welsh,	1	....	3	1	2	....	1	....	....	....	....	....	8
Irish,	....	....	2	....	....	2	....	....	....	....	3	1	8
German,	....	....	1	1	....	1	....	1	....	....	....	....	4
Polish,	3	1	3	1	1	2	1	....	1	1	1	2	17
Italian,	1	3	....	1	....	....	1	1	....	....	....	....	7
Slavonian,	....	....	2	....	....	....	....	....	1	....	1	....	4
Austrian,	....	....	...	....	....	....	....	....	....	....	....	1	1
Russian,	....	....	1	....	1	....	....	....	....	....	....	....	2
Totals,	5	5	13	6	4	5	3	2	2	1	6	5	57

TABLE H.—Nationality of Persons Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
American,	1	1	3	1	5	....	....	....	1	....	....	1	13
Welsh,	1	1	2	1	....	....	....	1	....	....	....	1	7
Irish,	....	1	1	2	....	....	1	1	....	1	....	1	8
German,	....	1	....	1	....	....	....	....	....	1	....	1	4
Polish,	3	1	1	1	1	1	3	2	1	....	....	2	16
Italian,	....	....	....	....	....	....	....	....	....	....	1	1	2
Slavonian,	....	....	1	....	....	....	....	....	....	....	....	....	1
Swedish,	....	1	....	....	....	....	....	....	....	....	....	....	1
Totals,	5	6	8	6	6	1	4	4	2	2	1	7	52

TABLE I.—Operators and mines, kind of openings, type and size of fans, size of furnaces, volume of air produced by fan or furnace per minute, number of splits of air currents, and number of persons employed inside

Names of Operators and Mines	Kind of opening	Gaseous or non-gaseous	Method of ventilation	Diameter of fan in feet	Width of blades in feet	Depth of blades in feet	Number of revolutions per minute	Water gauge developed—in inches	Name of fan	Power used	Number of splits of air currents	Number of cubic feet of air per minute entering the mine at inlet	Total quantity of air per minute circulating in all the splits in cubic feet	Number of persons employed inside
Delaware, Lackawanna and Western Railroad Co.														
Hyde Park Colliery:														
Hyde Park,	Shaft, ..	Gaseous,	Fan, ...	14	4	4	120	.5	Guibal, ..	Steam, ...	16	62,335	58,165	237
				14	4	4	92	.5						
Hyde Park,	Slope, ...	Non-gas.	Natural, .								......	53,170	45,050	157
Sloan,	Shaft, ..	Gaseous,	Fan, ...	24	6	6.9	64	2			11	194,150	139,180	247
Central,	Shaft, ..	Gaseous,	Fan, ...	24	8	6	58	1.4			6	62,900	52,660	233
Hampton,	Shaft, ..	Gaseous,	Fan, ...	12	4	4	121	.8			9	109,650	100.500	212
Continental,	Shaft, ..	Gaseous,	Fan, ...	14	4	4	125	.5			10	182,555	152,127	346
Archbald,	Shaft, ..	Gaseous,	Fan, ...	24	8	6	66	1.4			9	183,390	165.326	358
Pyne,	Shaft, ..	Gaseous,	Fan, ...	16	5	4.9	120	1.2			12	156,805	138,431	428
Bellevue Colliery:														
Bellevue,	Shaft, ..	Gaseous,	Fan, ...	18	4.5	4.5	125	1			7	114,420	93,405	362
	Shaft, ..	Gaseous,	Fan, ...	14	4	4	110	1			10	127,325	112,195	235
Bellevue,	Slope, ...	Gaseous,	Fan, ...	12	3.5	3.5	100	.05			2	39,000	29,400	52
Dodge,	Shaft, ..	Gaseous,	Fan, ...	16	4.5	4.5	118	1			11	138,713	111,146	358
Holden,	Shaft, ..	Gaseous,	Fan, ...	25	8	6	46	.4			7	117,403	93,530	288
Taylor,	Shaft, ..	Gaseous,	Fan, ...	25	8	6	60	1.8			7	130,900	105,200	288
				12	3.5	3	112	.8			4	68,700	56,562	166
National Colliery:														
National,	Shaft, ..	Gaseous,	Fan, ...	16	4	4	90	.6			4	82,600	72,000	277
Meadow Brook,	Tunnel, .	Non-gas.	Fan, ...	14	4	4	38	.8			3	51,300	48,700	109

Delaware and Hudson Co.														
Greenwood Colliery:														
Greenwood New No. 1,	Shaft,	Gaseous,	Fan,	17	5	5	75	.4	Guibal,	Steam,	3	40,200	37,000	114
Greenwood Old No. 1,	Drift,	Non-gas.	Natural,	......	......	......	......	......	......	......	2	27,600	25,100	78
Greenwood No. 12,	Drift,	Non-gas.	Natural,	......	......	......	......	......	......	......	1	14,300	13,600	50
Greenwood No. 8,	Drift,	Non-gas.	Natural,	......	......	......	......	......	......	......	1	18,200	17,200	75
Greenwood No. 11,	Drift,	Non-gas.	Natural,	......	......	......	......	......	......	......	1	8,500	7,500	14
Greenwood No. 2,	Slope,	Non-gas.	Fan,	14	4	4	45	.3	Guibal,	Steam,	1	15,300	14,400	80
Greenwood No. 2,	Shaft,	Gaseous,	Fan,	17	5	5	75	.7	Guibal,	Steam,	4	43,090	38,000	118
Greenwood No. 15,	Drift,	Non-gas.	Fan,	10	3	3	65	.2	Guibal,	Steam,	1	11,700	10,260	40
Oak Hill,	Drift,	Non-gas.	Natural,	......	......	......	......	......	......	......	1	12,220	9,750	36
Greenwood No. 6,*	Drift,	Non-gas.	Natural,	......	......	......	......	......	......	......	......	......	......	......
Greenwood No. 14,*	Drift,	Non-gas.	Natural,	......	......	......	......	......	......	......	......	......	......	......
Scranton Coal Co.														
Capouse,	Shaft,	Gaseous,	Fan,	20	5.5	5	80	1	Guibal,	Steam,	9	145,400	127,100	294
				18	5	5	75	1	Guibal,	Steam	......	......	......	......
People's Coal Co.														
Oxford,	Shaft,	Gaseous,	Fan,	16	4.7	4	90	.7	Guibal,	Steam,	10	144,800	134,400	200

*Ventilated by Oak Hill Drift.

TABLE 1.—Operators, location of collieries, railroads, etc.

Names of Operators and Collieries	County	Name of General Superintendent	Post Office	Name of Superintendent	Post Office	Railroad to Mine
Delaware, Lackawanna and Western Railroad Co.						
Hyde Park,	Lackawanna,	R. A. Phillips,	Scranton,	Thomas J. Williams,	Scranton,	D. L. and W.
Sloan and Central,						
Hampton,						
Continental,						
Archbald,						
Pyne,						
Bellevue,						
Dodge,						
Holden,				Evan J. Evans,	Scranton,	
Taylor,						
National,						
Washeries						
Hyde Park,	Lackawanna,	R. A. Phillips,	Scranton,	Thomas J. Williams,	Scranton,	D. L. and W.
Pyne,						
Archbald,						
Hampton,						
Bellevue,				George Wethers,	Scranton,	
Taylor,						
Delaware and Hudson Co.						
Greenwood,	Lackawanna,	C. E. Rose,	Scranton,	John Lovering,	Moosic,	Delaware and Hudson
Greenwood Washery,						
Scranton Coal Co.						
Capouse,	Lackawanna,	W. L. Allen,	Peckville,	John Von Bergen,	Scranton,	Ontario and Western
Capouse Washery,						
People's Coal Co.						
Oxford,	Lackawanna,	James G. Shepard,	Scranton,	John G. Hayes,	Scranton,	D. L. and W.
Marian Coal Co.						
Marian Washery,	Lackawanna,	W. P. Boland,	Scranton,	M. J. Healey,	Plains,	D. L. and W.
Minooka Coal Co.						
Minooka,	Lackawanna,	Robert J. Oliver,	Avoca,	....	....	....

TABLE 2.—Number of tons of coal mined, number of days worked, number of persons employed, number killed and injured, quantity of powder and dynamite used, etc.

Names of Operators and Collieries	County	Number of tons of coal shipped to market	Number of tons used at collieries for steam and heat	Number of tons sold to local trade and used by employes	Total production of coal in tons	Number of days worked	Number of employes	Number of fatal accidents	Number of non-fatal accidents	Number of kegs of powder used	Number of pounds of dynamite used	Number of horses and mules
Delaware, Lackawanna and Western Railroad Co.												
Hyde Park,	Lackawanna,	344,469	4,912	20,259	369,640	254	700	2	2	16,168	34,550	55
Sloan and Central,		455,584	....	422	456,006	250	885	4	4	19,335	4,918	47
Hampton,		115,636	....	103	115,739	190	374	2	1	5,095	2,353	35
Continental,		248,959	1,969	1,764	252,692	262	574	2	3	11,571	13.938	77
Archbald,		461,408	12,895	378	474,681	261	857	4	4	21,944	1,680	93
Pyne,		504,463	17,365	2,155	523,983	261	808	4	4	15,559	1,737	64
Bellevue,		466,288	500	15,329	482,117	257	983	5	8	19,662	13,088	47
Dodge,		182,812	300	44	183,156	138	649	1	1	9,325	2,450	49
Holden,		290,211	14,723	1,830	306,764	247	493	9	7	10,032	335	49
Taylor,		365,140	227	8,024	373,391	252	740	4	2	15,678	1,450	88
National,		208,845	14,600	8,364	231,809	245	684	4	2	12,984	32,031	58
		3,643,815	67,491	58,672	3,769.978	....	7,747	41	38	157,353	108,530	662
Washeries												
Hyde Park,	Lackawanna,	78,391	....	....	78,391	....	28	......	......	....	....	....
Pyne,		116,070	12,760	....	128,830	....	34	......	......	....	....	....
Archbald,		1,160	....	....	1,160	....	5	......	......	....	....	....
Hampton,		331,701	....	....	331,701	....	71	......	......	....	....	....
Bellevue,		276,176	....	....	276,176	....	63	......	......	12	6	5
Taylor,		193,997	7,500	....	201,497	....	54	......	......	8	10	6
				....	....	....	81	1	......	....	....	2
		997,495	20,260	....	1,017,755	....	336	1	......	20	16	13
Totals,	....	4,641,310	87,751	58,672	4,787,733	....	8,083	42	38	157,373	108.546	675

TABLE 2.—Continued

Names of Operators and Collieries	County	Number of tons of coal shipped to market	Number of tons used at collieries for steam and heat	Number of tons sold to local trade and used by employes	Total production of coal in tons	Number of days worked	Number of employes	Number of fatal accidents	Number of non-fatal accidents	Number of kegs of powder used	Number of pounds of dynamite used	Number of horses and mules
Delaware and Hudson Co.												
Greenwood,	Lackawanna, ...	204,930	11,609	2,790	219,329	169	860	4	6	19,055	35,800	116
Greenwood Washery,		68,861	17,421	....	86,282	....	43	2	1	....	....	....
Totals,	....	273,791	29,630	2,790	305,611	....	903	6	7	19,055	35,800	116
Scranton Coal Co.												
Capouse,	Lackawanna, ...	185,028	15,000	3,207	203,235	167	610	2	3	9,964	40,647	70
Capouse Washery,	Lackawanna, ...	54,558	5,000	....	59,558	....	26	......	......	....	....	....
Totals,	....	239,586	20,000	3,207	262,793	....	636	2	3	9,964	40,647	70
People's Coal Co.												
Oxford,	Lackawanna, ...	109,993	12,337	95,626	217,956	229	392	7	4	10,578	11,000	110
Marian Coal Co.												
Marian Washery,	Lackawanna, ...	59,023	2,838	265	62,126	....	28	......	......	....	....	2
Minooka Coal Co.												
Minooka,	Lackawanna, ...	....	....	551	551	98	8	......	......	18	50	1
Grand totals,	....	5,323,703	151,956	161,111	5,636,770	....	10,050	57	52	196,988	196,043	972

TABLE 2.—Part 2

Names of Operators	County	Number of Boilers					Locomotives			Number of steam engines of all classes	Total horse power	Number of pumps delivering water to surface	Capacity in gallons per minute	Quantity delivered to surface per minute—gallons	Number of electric dynamos	Number of air compressors
		Cylindrical	Horse power	Tubular	Horse power	Total horse power	Steam	Air	Electric							
Delaware, Lackawanna and Western Railroad Co.,	Lackawanna,	39	1,570	63	7,595	9,165	9	......	66	225	20,222	35	33,396	15,011	6	12
Delaware and Hudson Co.,		33	954	9	1,300	2,254	3	......	......	52	1,745	5	2,550	1,600	......	2
Scranton Coal Co.,		....	....	7	1,170	1,170	......	......	......	10	1,080	9	5,775	5,075	2	1
People's Coal Co.,		5	1,500	....	....	1,500	......	......	......	14	857	3	1,575	750	2	1
Marian Coal Co.,		1	150	2	160	310	......	......	......	3	95	......	....	....	......	......
Totals,		78	4,174	81	10,225	14,399	12	......	66	304	23,999	52	43,296	22,436	10	16

Table 3.—Number of each class of employes inside and outside of mines

Names of Operators and Collieries	County	Inside											Outside									Grand total inside and outside
		Mine foremen	Assistant mine foremen	Fire bosses and assistants	Miners	Miners' laborers	Drivers and runners	Doorboys and helpers	Pumpmen	Company men	All other employes	Total inside	Superintendents	Foremen	Blacksmiths and carpenters	Engineers and firemen	Slate pickers (boys)	Slate pickers (men)	Bookkeepers and clerks	All other employes	Total outside	
Delaware, Lackawanna and Western Railroad Co.																						
Hyde Park,		2	....	4	184	190	45	20	2	72	47	566	....	1	8	13	40	10	3	59	134	700
Sloan and Central,		3	....	6	233	233	29	14	7	77	100	702	....	2	11	13	45	10	4	98	183	885
Hampton,		1	1	2	89	90	15	7	....	20	53	278	....	1	4	2	34	3	1	51	96	374
Continental,		1	1	4	145	147	52	13	....	28	54	445	....	1	6	6	55	8	2	51	129	574
Archbald,		1	1	5	248	248	73	16	2	34	82	710	....	2	7	10	35	14	4	75	147	857
Pyne,		1	1	6	195	197	29	6	4	66	85	590	....	2	9	12	42	48	3	102	218	808
Bellevue,		3	1	7	269	269	48	16	10	35	140	798	....	2	7	12	59	8	5	92	185	983
Dodge,		1	1	3	170	170	52	4	2	29	71	503	....	2	6	21	33	4	3	77	146	649
Holden,		1	....	3	135	140	42	9	2	53	9	394	....	1	6	7	31	......	3	51	99	493
Taylor,		2	1	3	200	208	46	16	4	10	70	560	....	1	7	15	65	......	4	88	180	740
National,		1	2	3	176	204	64	17	4	24	67	562	....	1	5	13	40	1	3	59	122	684
		17	9	46	2,044	2,096	495	138	37	448	778	6,108	....	16	76	124	479	106	35	803	1,639	7,747
Washeries																						
Hyde Park,	Lackawanna,	....	....	1	.....	......	......	......	....	......	7	8	....	....	....	2	2	1	......	15	20	28
Pyne,		....	....	...	.....	......	......	......	....	......	.....	.....	...	1	....	4	......	......	1	28	34	34
Archbald,		....	....	...	.....	......	......	......	....	......	.....	.....	...	...	...	1	......	......	......	4	5	5
Hampton,		1	....	....	......	......	......	......	....	8	.....	9	....	2	3	1	6	......	1	49	62	71
Bellevue,		1	....	...	.....	......	......	......	....	......	7	8	....	1	1	4	2	......	1	46	55	63
Taylor,		1	....	....	1	......	......	......	....	......	3	5	....	1	2	5	1	......	1	39	49	54
		3	....	1	1	......	......	......	....	8	17	30	....	5	6	17	11	1	4	181	225	255
Central Boiler Plant,		....	....	1	.....	......	......	......	....	10	.....	11	....	2	1	18	......	......	1	13	35	46
Central Power Station,		....	....	....	......	......	......	......	....	......	.....	.....	...	...	...	4	......	......	......	4	8	8

Central Water Shaft, ...		....	....	...	.....	......	......	......	1	......	.....	1	....	....	....	3	......	......	......	.....	3	4
Dodge Boiler Plant, ...		....	....	...	.....	......	......	......	....	......	.....	......	...	1	....	14	......	......	......	8	23	23
Totals, ...	....	20	9	48	2,045	2,096	495	138	38	466	795	6,150	....	24	83	180	490	107	40	1,009	1,933	8,083
Delaware and Hudson Co.																						
Greenwood, ...	Lackawanna,...	2	1	3	280	212	91	14	4	40	8	655	....	1	15	27	27	6	3	126	205	860
Greenwood Washery, ...		....	....	...	.....	......	......	......	....	......	.....	......	...	...	....	3	6	1	1	32	43	43
Totals, ...	....	2	1	3	280	212	91	14	4	40	8	655	....	1	15	30	33	7	4	158	248	903
Scranton Coal Co.																						
Capouse, ...	Lackawanna,...	1	1	3	133	119	69	15	3	26	81	451	....	1	9	8	67	28	2	44	159	610
Capouse Washery, ...		....	....	...	.....	......	......	......	....	......	.....	......	....	1	1	7	1	2	......	14	26	26
Totals, ...	....	1	1	3	133	119	69	15	3	26	81	451	....	2	10	15	68	30	2	58	185	636
People's Coal Co.																						
Oxford, ...	Lackawanna,...	1	2	3	81	117	35	7	2	14	13	278	1	1	9	9	39	......	6	49	114	392
Marian Coal Co.																						
Marian Washery, ...		....	....	....	.....	......	......	......	....	......	.....	......	1	1	1	4	4	......	1	16	28	28
Minooka Coal Co.																						
Minooka, ...		....	....	....	1	2	......	......	....	......	.....	3	....	1	....	......	......	......	......	4	5	8
Grand totals, ...	....	24	13	57	2,543	2,546	690	174	47	546	897	7,537	2	30	118	238	634	144	53	1,294	2,513	10,050

TABLE 3.—Part 2

Names of Operators and Collieries	County	Number of Days Worked in Breaker												
		January	February	March	April	May	June	July	August	September	October	November	December	Total
Delaware, Lackawanna and Western Railroad Co.														
Hyde Park,	Lackawanna,	22	20	21	20	22	20	22	23	20	22	21	21	254
Sloan and Central,		21	20	20	20	21	21	22	23	21	23	19	19	250
Hampton,		....	....	8	19	20	20	21	23	20	20	20	19	190
Continental,		22	20	23	22	23	21	23	23	20	23	22	20	262
Archbald,		22	21	23	21	22	21	23	23	21	22	21	21	261
Pyne,		23	20	22	21	22	21	22	24	21	23	21	21	261
Bellevue,		23	19	23	21	23	20	21	24	21	20	21	21	257
Dodge,		22	18	23	21	22	22	10	....	....	....	....	....	138
Holden,		23	18	20	21	22	19	21	23	19	21	20	20	247
Taylor,		23	19	21	20	21	20	22	23	21	21	22	19	252
National,		18	17	20	21	21	21	22	23	21	19	21	21	245
Delaware and Hudson Co.														
Greenwood,		16	15	15	16	15	14	14	14	13	16	15	6	169
Scranton Coal Co.														
Capouse,		15	14	11	13	14	14	14	13	13	15	15	16	167
People's Coal Co.														
Oxford,		21	19	21	20	18	18	18	19	17	19	19	20	229
Minooka Coal Co.														
Minooka,		....	....	....	....	....	....	....	....	25	24	25	24	98

TABLE 4.—Fatal accidents inside and outside of mines

Date of accident	Name of Person	Nationality	Occupation	Age	Married or single	Number of widows	Number of orphans	Name of Mine	County	Nature and Cause of Accident in Brief
Jan. 7	Frank Szatkus,	Polish,	Miner,	30	M.	1	1	Oxford,	Lackawanna,	Instantly killed by fall of roof at face of chamber in No. 3 Dunmore vein. Did not examine roof after blasting.
12	Joseph Dumbroski,	Polish,	Miner,	36	M.	1	3	Dodge,		Fatally injured by fall of roof at face of chamber in New County vein. Died same day.
14	David Redmond,	Welsh,	Doorman,	71	M.	1	....	Archbald,		Killed by being run over by cars on gangway road, Diamond vein. Fifty feet inside the door there was a head block, which he took off, and when the driver came out with a trip of loaded cars there were not enough sprags in to hold them. Redmond tried to get the door open for the cars, but was struck by trip.
16	Mike Schusdak,	Polish,	Laborer,	28	S.	....	....	Sloan,		Killed by fall of roof at face of chamber in Clark vein, while loading a car of coal.
18	Paskey Larock,	Italian,	Laborer,	23	M.	1	....	Capouse,		Killed by fall of roof near main gangway while loading a car of coal. He was robbing pillars.
Feb. 4	Fred Marconie,	Italian,	Miner,	23	S.	....	....	Capouse,		Killed by fall of roof at face of chamber on east side gangway, Big vein, while visiting another miner.
14	Frank Lewisco,	Italian,	Laborer,	22	S.	....	....	Greenwood Washery,		Fatally burned by a slide of burning culm, while flushing culm into conveyor line. Outside. Died at Moses Taylor Hospital, February 16.
15	Michael Selico,	Polish,	Laborer,	38	M.	1	1	Oxford,		Killed by a fall of roof at face of chamber in Big vein.
19	Chesie Yacochi,	Italian,	Miner,	25	S.	....	....	Meadow Brook Tunnel,		Fatally injured by fall of roof at face of chamber in No. 1 Dunmore vein while robbing pillars. Died same day.
19	William Reader,	American,	Driver,	20	S.	....	....	Oxford,		Fatally injured by being kicked by a mule. Died at West Side Hospital, February 23.

TABLE 4. —Continued

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Number of widows	Number of orphans	Name of Mine	County	Nature and Cause of Accident in Brief
March	2	John Farrell, ...	American, ..	Company man.	29	S.	....	....	Meadow Brook Tunnel,		Fatally injured by being struck by runaway car. Died next day. He went up to a chamber to help a miner place a car on the track. The chamber had a very heavy grade on the road, and when they placed car on track it started down the grade. Farrell tried to keep ahead of it to gangway, but car caught him before he reached the gangway.
	2	William Z. Williams,	Welsh, ...	Miner, ...	58	M.	1	2	Holden, ...	Lackawanna,	Fatally burned by an explosion of gas in their working places, in No. 4 Counter and New F gangway, Clark vein.
	2	Thomas Williams, ...	Welsh, ...	Miner, ...	32	M.	1	2			
	2	Frank Cososki, ...	Polish, ...	Miner	42	M.	1	5			
	2	John Washnock, ...	Russian, ...	Miner, ...	48	M.	1	3			
	2	Chesmas Cosfoski, .	Polish, ...	Laborer, ...	23	M.	1	....			
	2	Gustave Orocoski, ..	Slavonian, .	Laborer, ...	31	M.	1	5			
	2	John Zerzava, ...	Slavonian, .	Laborer, ...	34	M.	1	1			
	11	Patrick Loftus, ...	Irish, ...	Miner, ...	30	S.	....	....	Greenwood No. 2 Shaft,	Lackawanna,	Loftus was instantly killed and Crebitski fatally injured at face of chamber in Checker vein. While tamping a hole they had drilled in the bottom rock, the powder exploded and they were caught by flying rock. Crebitski died at Lackawanna Hospital, March 14.
	11	John Crebitski, ...	Polish, ...	Laborer, ...	30	M.	1	3			
	12	William Brown, ...	Irish, ...	Laborer, ...	44	M.	1	5	Bellevue Shaft,..		Fatally injured by falling under electric motor on main road in No. 2 Dunmore vein. Died March 15.
	12	Edward Watkins, ...	Welsh, ...	Driver boss,	22	S.	....	....	Bellevue Shaft,..		Instantly killed by falling under electric motor on main road, Clark vein.
	23	Fred Otto, ...	German,.....	Runner, ...	18	S.	....	....	Pyne, ...		Instantly killed by being run down by mine cars that were being pushed into an airway by an electric motor. Clark vein.

April	8	Peter Perrusha, ...	German, ...	Laborer, ...	52	S.	....	....	Bellevue Shaft, ..	Lackawanna,	Instantly killed by premature blast at face of chamber in Clark vein. While he and his miner were tamping a hole in the top coal, the charge exploded and Perrusha was caught by flying coal.
	10	Joseph Cadella, ...	Italian, ...	Miner, ...	57	M.	1	....	Meadow Brook Tunnel,		Fatally injured by a fall of roof at face of chamber while robbing pillars in Dunmore vein. He was filing his bits before starting to work, when a portion of the roof fell on him. Died next day.
	15	Samuel Jones, ...	Welsh, ...	Miner, ...	45	S.	....	....	Hampton, ...		Killed by a fall of top coal at face of chamber in Rock vein, while gathering his tools.
	15	Richard Cummings, .	American, ..	Driver, ...	17	S.	....	....	Taylor, ...		Fatally injured by being run over by trip of mine cars on main road Big vein. He attempted to get on front end of cars, and slipped, and fell under them.
	18	Michael Gorman, ...	American, ..	Helper, ...	22	S.	....	....	Pyne, ...		Killed by being squeezed by mine cars on main gangway road. He was riding between the first and second car. The first car jumped the track and he whistled to motorman to stop. The motorman found him lying alongside of track unconscious. He died a few minutes later.
	24	Stanley Boyiski, ...	Polish, ...	Laborer, ...	43	M.	1	1	Sloan, ...		Killed by a fall of top coal at face of chamber, in Clark vein.
May	14	Peter Scrut, ...	Russian, ...	Laborer, ...	35	M.	1	3	Taylor, ...		Instantly killed by a fall of roof at face of chamber in Rock vein. The miner had just fired a blast and Scrut was loading a car when a portion of the roof fell on him.
	22	Fred Davis, ...	Welsh, ...	Lineman, ..	19	S.	....	....	Taylor Breaker, ..		Killed by being caught in shaft of dust fan in breaker. Coroner's jury rendered a verdict of accidental death.
	25	David Morris, ...	Welsh, ...	Miner, ...	37	M.	1	6	Continental, ...		Instantly killed by flying coal from blast at face of airway in Dunmore vein. He was tamping a hole and the charge exploded.
	31	Mike Koloski, ...	Polish, ...	Miner, ...	29	M.	1	1	Bellevue Shaft, ..		Fatally injured by flying coal from a blast about twelve feet from face of chamber in Dunmore vein. Died June 3.
June	11	Anthony Mahon, ...	Irish, ...	Miner, ...	31	M.	1	1	Oxford, ...		Killed by blast at face of chamber in No. 3 Dunmore vein. He was firing a hole and he thought the squib had missed fire. He went back to the face and the blast exploded.
	13	Peter Burkor, ...	Polish, ...	Miner, ...	50	M.	1	7	Continental, ...		Killed by fall of roof at face of chamber on New County vein pitch, while standing a prop.
	14	John Theil, ...	German, ...	Miner, ...	52	M.	1	3	Archbald, ...		Killed by a fall of roof at face of chamber in No. 4 gangway Rock vein.

TABLE 4.—Continued

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Number of widows	Number of orphans	Name of Mine	County	Nature and Cause of Accident in Brief
June	17	Thomas Ruane, ...	Irish, ...	Locomotive brakeman,	17	S.	....	....	Greenwood, ...	Lackawanna,	Killed by falling under a trip of mine cars pushed by a locomotive. He was riding on front end of trip. The first car got off track at the frog. Ruane tried to get out of the way, but the car, which was loaded with ties, passed over him.
	29	William Sabiliski, ..	Polish, ...	Laborer, ...	35	S.	....	....	Bellevue Shaft,..		Killed by falling down supply shaft from Clark vein to Dunmore vein. The cage does not stop at Clark vein, but slows up while passing the fans. Sabiliski absent-mindedly started to step off cage when it slowed up. The footman at Clark vein called to him to stay on cage, and Sabiliski started back, but he lost his balance and fell to sump below.
July	3	Peter Pacifico, ...	Italian,......	Miner, ...	27	M.	1	1	Oxford, ...		Instantly killed by fall of coal in Rock vein while robbing pillars. They had fired a blast in the bottom coal and were barring out some coal before they examined the top coal, and the top coal fell on them.
	3	Peter Olas, ...	Polish,.......	Laborer, ...	26	S.	....	....	Oxford, ...		
	5	Jacob Reese, ...	Welsh, ...	Company man,	28	M.	1	1	Pyne, ...		Killed by falling under a trip of mine cars on main gangway road in New County vein.
Aug.	14	William Weitz, ...	German,.....	Doorman, .	63	S.	....	....	Hyde Park, ...		Fatally injured by being struck by loaded mine car on main haulage road in Dunmore vein. Died next day.
	31	Vinceny Renkiani, ...	Italian,......	Miner, ...	44	M.	1	2	Meadow Brook Tunnel,		Fatally injured by fall of roof and coal while robbing pillars in Dunmore vein. Died September 3.

Sept.	13	Joseph Dudeck,	Polish,	Miner,	37	M.	1	3	Hyde Park,	Lackawanna,	Instantly killed by premature blast at face of airway in Dunmore vein. He had fired a blast, which had partly cut the coal, and he was placing another charge in the hole when it exploded.
	23	John Wilhelm,	Slavonian,	Driver,	24	M.	....	....	Oxford,		Killed by being kicked on the head by a mule.
Oct.	22	Joseph Prosesick,	Polish,	Laborer,	35	M.	1	3	Hampton,		Killed by fall of roof at face of chamber in Diamond vein.
Nov.	1	Steve Tsehanin,	Slavonian,	Laborer,	23	S.	....	....	Pyne Breaker,		Killed by falling into breaker rolls in breaker. The coroner's jury rendered a verdict of accidental death.
	5	Joseph Ostrosky,	Polish,	Laborer,	27	M.	1	2	Central,		Killed by fall of roof at face of No. 6 gangway, New County vein.
	6	Patrick Kearney,	Irish,	Slatepicker,	10	S.	....	....	Greenwood Washery,		Killed by falling into breaker rolls in washery. The coroner's jury rendered a verdict of accidental death.
	20	William Thornton,	Irish,	Miner,	36	M.	1	7	Archbald,		Killed by a fall of roof at face of chamber in Big vein.
	27	Arthur J. Beggs,	American,	Coal inspector,	31	M.	....	....	Taylor,		Killed by being squeezed between two railroad cars underneath the breaker.
	30	Joseph Connelly,	Irish,	Miner,	36	M.	1	2	Taylor,		Instantly killed by fall of roof. He had fired a blast, which dislodged five props and when he returned to ascertain the result of blast, about thirty feet from the face of the chamber in Big vein, a portion of the roof fell on him.
Dec.	4	John Zelinsky,	Polish,	Miner,	45	M.	1	5	**Archbald,**		Killed by fall of roof while re-standing props that had been dislodged by a blast at face of chamber in Diamond vein.
	4	John Cawley,	Irish,	Laborer,	22	S.	...	...	Greenwood,		Killed by being struck by flying pieces of metal from boiler that exploded. Outside.
	26	Thomas Phillips,	American,	Driver,	19	S.	...	....	Holden,		Killed by falling under loaded mine car on No. 3 gangway, Clark vein.
	27	Dominick Junkosky,	Polish,	Laborer,	32	M.	1	2	Central,		Fatally injured by fall of roof at face of airway in Dunmore vein. Died January 1, 1908.
	29	Pete Dueko,	Austrian,	Laborer,	30	M.	1	2	Central Boiler Plant,		Killed by platform breaking and part of motor falling upon him. Outside.

TABLE 5.—Non-fatal accidents inside and outside of mines

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Name of Mine	County	Nature and Cause of Accident in Brief
Jan.	2	William Resereski,	Polish,	Miner,	43	M.	Greenwood No. 1,	Lackawanna,	Fracture of the spine by fall of roof while drilling a hole at face of chamber in Dunmore vein.
	19	Michael Shanoski,	Polish,	Laborer,	22	S.	Greenwood No. 1,		Leg cut off by flying coal from a blast breaking through pillar at face of chamber in No. 3 Dunmore vein.
	24	Stephen Ivers,	American,	Miner,	29	M.	Continental,		Hip dislocated by fall of roof while mining out a piece of coal at face of chamber in Rock vein.
	24	John Molinoski,	Polish,	Miner,	24	S.	Greenwood No. 1,		Leg fractured by fall of bony about thirty feet back from face of chamber in No. 3 Dunmore vein.
	25	Mathias Davis,	Welsh,	Footman,	21	S.	Holden,		Head and back bruised by piece of ice that fell down shaft.
Feb.	4	William Benyon,	Welsh,	Rock contractor,	51	M.	Bellevue Shaft,		Arm fractured by falling off platform at foot of shaft.
	5	John Schaffer,	German,	Company man,	40	M.	Bellevue Shaft,		Leg fractured by being struck by a prop that fell off cage at foot of shaft.
	18	Richard Sullivan,	American,	Helper,	17	S.	Oxford,		Leg fractured by being kicked by horse. Outside.
	23	Patrick Joyce,	Irish,	Miner,	26	S.	Taylor,		Injured about back and abdomen by a fall of top coal at face of chamber in Big vein.
	25	Steve Meslisky,	Polish,	Miner,	28	M.	Oxford,		Arm fractured by flying coal from a blast near face of chamber while trying to get to a place of safety.
	26	Mike Yauddrick,	Swedish,	Miner,	30	M.	Bellevue Shaft,		Leg fractured and bruised on side of body by flying coal from blast at face of chamber in Dunmore vein.
March	1	John Balok,	Polish,	Laborer,	50	M.	Pyne,		Thigh badly crushed by fall of roof on main gangway road, New County vein.
	2	Andrew Zernitski,	Slavonian,	Company man,	27	M.	Holden,	Lackawanna,	Seriously burned and bruised by an explosion of gas that occurred at about 2 P. M. on No. 4 Counter and New F gangway, Clark vein.
	2	John Hill,	Welsh,	Doorman,	49	M.			
	2	Daniel Evans,	Welsh,	Helper,	17	S.			

March	5	Owen O'Malley,	Irish,	Miner,	30	M.	Hyde Park,	Lackawanna,	Leg fractured by fall of roof at face of chamber on B gangway, New County vein.
	7	James O'Boyle,	American,	Driver,	16	S.	Bellevue Shaft,		Leg fractured by being kicked by a mule and thrown under mine car on South Side gangway, Clark vein.
	18	David Pierce,	American,	Miner,	48	M.	Continental,		Back badly lacerated by fall of top coal at face of chamber on Clark vein pitch.
	21	Edward Douse,	American,	Motorman,	35	M.	Pyne,		Injured internally by being squeezed between motor and mine car near foot of shaft, Clark vein.
April	5	Elmer Sweet,	American,	Company man,	17	S.	Bellevue Shaft,		Leg fractured by being squeezed between motor and narrow side of main road in Dunmore vein.
	8	Thomas Mulhern,	Irish,	Laborer,	44	S.	Capouse,		Ribs fractured by being struck by flying coal from blast at face of chamber in Dunmore vein.
	8	George Hiltz,	German,	Miner,	59	M.	Bellevue Shaft,		Seriously injured by premature blast at face of chamber in Clark vein.
	9	Gomer Lewis,	Welsh,	Runner,	26	M.	Sloan,		Slightly injured by being struck by trolley wire near foot of shaft.
	11	Michael Higgins,	Irish,	Miner,	35	M.	Archbald,		Back and hips injured by flying rock from blast at face of chamber in Big vein.
	12	Stephen Snyder,	Polish,	Driver,	17	S.	Greenwood No. 2,		Face and hands burned by powder while taking a keg into the workings in a mine car.
May	1	Emanuel Boyer,	American,	Miner,	50	M.	Archbald,		Leg fractured by fall of roof at face of chamber in Rock vein.
	2	James Delaney,	American,	Driver,	16	S.	Dodge,		Arm fractured by falling off mine car on main road.
	6	William Riddle,	American,	Company man,	22	S.	Pyne,		Leg fractured by fall of top coal at face of chamber in Clark vein.
	6	Thomas Dolan,	American,	Slatepicker,	16	S.	Bellevue Breaker,		Arm fractured by falling on floor in breaker while getting out of seat.
	22	Anthony Soloski,	Polish,	Driver,	17	S.	Sloan,		Nose fractured by being kicked by a mule on No. 13 gangway, Clark vein.
	25	William R. Jones,	American,	Driver,	17	S.	Taylor,		Injured internally by mule stepping on his stomach on B gangway, Clark vein.
June	19	John Venick,	Polish,	Laborer,	25	S.	Oxford,		Leg fractured by fall of coal at face of chamber in Big vein.
July	3	Paul Chlengenski,	Polish,	Driver,	17	S.	Continental,		Burned on face and hands while taking powder from miner's box in a chamber in Clark vein.
	11	John Domonik,	Polish,	Laborer,	42	M.	Pyne,		Leg fractured by slide of coal at face of chamber in Clark vein.
	19	Leo Petroski,	Polish,	Driver,	16	S.	Holden,		Leg fractured by being struck by mine car on gangway road, Clark vein.
	27	Patrick Mangan,	Irish,	Laborer,	58	M.	Greenwood Washery,		Face and hands burned by hot water and burning culm on dump. Outside.
Aug.	8	Charles McCarthy,	Irish,	Runner,	18	S.	Capouse,		Spine fractured by being thrown off mine car and struck by broken props on gangway road, Clark vein.

TABLE 5.—Continued

Date of accident	Name of Person	Nationality	Occupation	Age	Married or single	Name of Mine	County	Nature and Cause of Accident in Brief
Aug. 16	Steve Olinski,	Polish,	Laborer,	27	M.	Holden,	Lackawanna,	Skull and leg fractured by fall of roof at face of chamber in Clark vein.
19	John Cherosky,	Polish,	Doorman,	28	S.	Archbald,		Leg fractured by a mule falling on him on gangway road, Big vein.
23	Benjamin Jones,	Welsh,	Doorboy,	17	S.	Sloan Surface vein,		Leg fractured by falling under electric motor on gangway.
Sept. 18	Stanley Colinski,	Polish,	Laborer,	30	S.	Greenwood No. 2,		Leg fractured by fall of top coal at face of chamber in New County vein.
21	William Ott,	American,	Slatepicker,	15	S.	Pyne Breaker,		Badly squeezed between railroad car and breaker timber. Outside.
Oct. 7	John Decker,	German,	Miner,	48	M.	Capouse,		Compound fracture of leg by fall of roof while robbing pillars at face of chamber on Clark vein pitch.
31	Michael Kennedy,	Irish,	Miner,	55	M.	Oxford,		Hand cut off and hip dislocated by fall of roof at face of chamber in Dunmore vein.
Nov. 5	Joe Mancalli,	Italian,	Laborer,	24	S.	National,		Compound fracture of leg by flying coal from a blast blowing through pillar at face of chamber in Clark vein.
Dec. 4	John Hughes,	Irish,	Fireman,	24	S.	Greenwood,		Burned about the body by hot coal and water. Boiler exploded outside.
10	Mike Slavinski,	Polish,	Laborer,	25	S.	Holden,		Skull fractured by fall of roof at face of chamber on No. 3 gangway, Clark vein.
16	Henry Krienberg,	German,	Miner,	47	M.	Hyde Park,		Ribs fractured by fall of roof at face of chamber in New County vein.
16	Louis Penti,	Italian,	Dumpman,	45	M.	National,		Contusion of back by falling under culm car on dump. Outside.
23	John E. Jones,	Welsh,	Miner,	63	M.	Central,		Face and hands slightly burned by gas at face of old chamber in New County vein.
23	Frank Merris,	Polish,	Laborer,	25	S.	Hampton,		Face and hands cut and injured internally by flying coal from blast at face of chamber in Diamond vein.
27	Edwin Beecham,	American,	Footman,	24	S.	Bellevue Shaft,		Leg fractured by being bumped between two cars at foot of shaft.

EXPLOSION OF GAS

March 2, at 5 P. M., I was informed that a serious explosion of gas had occurred in the Clark vein of the Holden mine, of the Delaware, Lackawanna and Western Railroad Company. I went to the mine and found that seven men had been fatally burned and others slightly injured. The men were removed to the Taylor Hospital and the next day the following died from injuries received: William Z. Williams, miner, Thomas Williams, miner, Frank Consoski, miner, John Washnock, miner, Chesmas Cosfoski, laborer, Gustave Crocoski, laborer, and John Zerzava, laborer. The explosion took place about 2 P. M. On March 4, in company with District Superintendent E. J. Evans, Assistant W. E. Loomis and Mine Foreman George W. Powell, I made a thorough investigation as to the cause of the explosion, but could find none. The ventilation in this mine is good, and will compare favorably with that in any other mine in the district, but it may be that some doors were allowed to remain open on the day of the accident. Having failed to locate the cause of the explosion, I notified Coroner James Stein to hold an inquest. The inquest was held in the Lackawanna County Court House, at Scranton, March 15, 19 and 21. The jury, after hearing several witnesses, adjourned until the next day, as they wished to visit the scene of accident. On March 22, the jury, after spending several hours in the mine making an investigation, went to the office of Coroner Stein in the Dime Bank Building, Scranton, and rendered the following verdict:

"We, the undersigned jury, find from the evidence adduced and after making a thorough investigation of the mine and place of accident, that the mine is properly managed as to the mining of coal, the ventilation is good, and the mine laws are strictly complied with in every particular.

We find that the gas accumulated very rapidly in the chambers on New F Gangway, and on No. 4 Counter, where the accident occurred, but the cause of this accumulation is unknown, as the explosion itself destroyed all evidence which could prove the cause thereof.

JAMES STEIN, Coroner,
B. T. JAYNE,
WALLACE MOSHER,
DAVID STANFORD,
EDWARD SANDERS,
EVAN WALTERS,
MARTIN LAVELLE,
Jurors."

CONDITION OF COLLIERIES AND IMPROVEMENTS

DELAWARE, LACKAWANNA AND WESTERN RAILROAD COMPANY

Archbald.—A new washery annex was completed and put into service on September 13, capacity 600 tons per day.

Hyde Park—One rock tunnel 6 x 12, length 125 feet, from Rock vein to Diamond vein, to be used as a second opening.

One 10 x 18 shaft, east of the breaker, sunk to the Surface vein a depth of 80 feet, to be used as a second opening and air shaft. This shaft has been completed, but the ventilating fan has not yet been installed.

One 12 x 12 air shaft, to be sunk to the Dunmore veins, has been sunk to a depth of 35 feet, and is now in progress of sinking. This shaft will be equipped with an 8 x 24 Guibal fan with a steel casing.

Hampton.—One rock tunnel 7 x 12, length 159 feet, from Rock to Diamond vein, to redeem bottom coal in Diamond.

Sloan.—One rock tunnel 7x12 feet and 90 feet in length, from surface to Surface vein, to be used as a second opening.

One rock slope from the Clark vein to the No. 3 Dunmore vein, 7x12, and 475 feet in length, pitch 15 degrees.

One shaft 12x32 and 185 feet in depth, from the Clark vein to the No. 4 Dunmore vein, located about 700 feet east of Central main shaft. This shaft was completed during the year, and operations commenced in the Dunmore vein.

Central Boiler Plant.—The work of installing six new Maxim boilers, with a total of 3,500 horse power, is now in progress and nearly completed.

Dodge.—Main shaft sunk from Big vein to Dunmore vein and also general improvements made in breaker.

Electrical Machinery Installed

Pyne.—One 300 K. W. rotary converter, and an addition to the sub- station building to house the same, one 6½ ton electric locomotive in Clark vein, one 6½ ton electric locomotive in Big vein.

Archbald.—Two 6½ ton electric locomotives to operate on Rist and Rossars gangways in Big vein.

Continental.—One 300 K. W. rotary converter located on top of the Dunmore vein slope, one 6½ ton electric locomotive to operate in the Dunmore vein.

Hyde Park.—One 300 K. W. rotary converter with addition to sub-station to house the same. One 300 K. W. rotary converter taken away from this colliery and installed at the Central Water shaft for Sloan New County vein.

Three 6½ ton electric locomotives to operate in the New County and Dunmore veins. One Jeffrey rock crusher and foundation, to crush all rock and bone coming from the breaker in order to flush the same into the mines.

Hampton.—Three 6½ ton electric locomotives in the Diamond and Rock veins.

Sloan.—One 100 H. P. electric hoist on Dunmore vein slope, induction motor. Three 6½ ton electric locomotives installed to operate in the Surface and New County veins.

One 200 K. W. rotary converter at water shaft to supply power to Sloan New County vein. One 4x14 feet dust fan, in progress of erection, to take the dust from the breaker.

Bellevue.—One 450 gallon capacity electric pump installed in Clark vein. Electric pumps installed in Nos. 1 and 2 slopes and No. 3 tunnel. Electric chain hoist installed at foot of main shaft. Four electric locomotives to operate in the Clark and Dunmore veins, and one rotary converter. A new concrete wash house with lockers erected. New fire pump and fire line.

Dodge.—One 30 H. P. motor for endless rope, three electric locomotives inside, one rotary converter sub-station installed.

Taylor.—Lighting breaker and buildings with electricity, one 300 K. W. rotary converter and sub-station building.

Holden.—Four electric locomotives installed in Clark vein and one electric pump in Clark vein.

National.—One electric hoist in Clark vein, three electric locomotives, and a new water reservoir outside.

DELAWARE AND HUDSON COMPANY

Greenwood.—Checker vein plane at No. 1 new shaft extended 600 feet. No. 1 slope in No. 2 shaft driven 125 feet and completed. No. 1 plane in No. 2 shaft driven 900 feet.

The general condition of almost all the collieries in the district, as to ventilation, drainage and general safety, is good.

Fifth District

LACKAWANNA, LUZERNE AND SULLIVAN COUNTIES

Scranton, Pa., February 27, 1908.

Hon. James E. Roderick, Chief of Department of Mines:

Sir: I have the honor to transmit herewith my report as Inspector of Mines for the Fifth Anthracite District, for the year ending December 31, 1907, as provided in the Act of April 14, 1903.

Respectfully submitted,
H. D. JOHNSON,
Inspector.

SUMMARY OF STATISTICS

Number of collieries,	18
Number of mines,	44
Number of mines in operation,	44
Number of tons of coal shipped to market,	3,214,901
Number of tons used at mines for steam and heat,	303,823
Number of tons sold to local trade and used by employes,	52,433
Number of tons produced,	3,571,157
Number of tons produced by compressed air machines,	—
Number of tons produced by electrical machines,	176,132
Number of persons employed inside of mines,	6,482
Number of persons employed outside,	2,413
Number of fatal accidents inside of mines,	18
Number of fatal accidents outside,	6
Number of non-fatal accidents inside of mines,	51
Number of non-fatal accidents outside,	18
Number of tons of coal produced per fatal accident inside,	198,398
Number of persons employed per fatal accident inside,	360
Number of persons employed per fatal accident outside,	402
Number of persons employed per non-fatal accident inside,	134
Number of persons employed per non-fatal accident outside,	127
Number of wives made widows,	13
Number of children orphaned,	32
Number of steam locomotives used inside of mines,	3
Number of steam locomotives used outside,	23
Number of electric motors used inside,	34
Number of electric motors used outside,	2
Number of fans in use,	33
Number of furnaces in use,	1
Number of gaseous mines in operation,	19
Number of non-gaseous mines in operation,	25
Number of new mines opened,	1

TABLE A

PRODUCTION OF COAL

Names of Operators	Tons
Pennsylvania Coal Company,	1,512,266
Lehigh Valley Coal Company,	583,120
Jermyn and Company,	353,122
Hillside Coal and Iron Company,	210,645
Connell Anthracite Mining Company,	176,132
Hudson Coal Company,	169,138
Northern Anthracite Coal Company,	135,596
Elliott McClure and Company,	119,214
O'Boyle-Foy Anthracite Coal Company,	69,251
Robertson and Law,	68,526
Delaware, Lackawanna and Western Railroad Company,	68,094
Austin Coal Company,	37,785
Brookside Coal Company,	35,292
Reliance Coal Company,	27,258
Randall and Schaad Brothers,	5,718
Total,	3,571,157

Production by Counties

Lackawanna,	1,679,020
Luzerne,	1,505,440
Sullivan,	386,697
Total,	3,571,157

TABLE B.—Fatal and non-fatal accidents inside and outside of mines; number of tons of coal produced per accident; number of persons employed; number employed per accident

Names of Operators	Fatal Accidents			Non-fatal Accidents			Tons of coal produced per fatal accident inside	Tons of coal produced per non-fatal accident inside	Number of employes inside	Number of employes outside	Total number of employes	Number of employes inside per fatal accident	Number of employes outside per fatal accident	Number of employes inside per non-fatal accident	Number of employes outside per non-fatal accident
	Inside	Outside	Total	Inside	Outside	Total									
Pennsylvania Coal Co., ...	6	3	9	13	5	18	252,044	116,328	2,561	893	3,454	427	297	197	178
Lehigh Valley Coal Co., ...	7	....	7	14	2	16	83,303	41,651	794	318	1,112	113	....	57	159
Jermyn and Co., ...	2	1	3	5	1	6	176,561	70,624	911	216	1,127	456	216	182	216
Hillside Coal and Iron Co., ...	2	....	2	2	2	4	105,323	105,323	361	119	480	180	....	180	59
Connell Anthracite Mining Co., ...	1	....	1	4	2	6	176,132	44,033	209	121	330	209	....	52	60
Hudson Coal Co., ...	....	1	1	6	1	7	169,138	28,189	379	167	546	....	167	63	167
Northern Anthracite Coal Co., ...	....	....	....	1	....	1	....	135,596	125	75	200	....	....	125	....
Elliott McClure and Co., ...	....	1	1	2	3	5	119,214	59,607	454	161	615	....	161	227	54
O'Boyle-Foy Anthracite Coal Co., ...	....	....	....	1	....	1	....	69,251	105	58	163	....	....	105	....
Delaware, Lackawanna and Western Railroad Co., ...	....	....	....	1	....	1	....	68,094	319	110	429	....	....	319	....
Brookside Coal Co., ...	....	....	....	....	1	1	....	....	....	23	23	....	....	....	23
Reliance Coal Co., ...	....	....	....	2	1	3	27,258	13,629	73	42	115	....	....	36	42
Miscellaneous companies, ...	....	....	....	....	....	....	....	....	191	110	301	....	....	....	....
Totals and averages for district, ...	18	6	24	51	18	69	198,398	70,023	6,482	2,413	8,895	360	402	134	127

TABLE C.—Classification of Fatal Accidents Inside and Outside of Mines

	Months													
	January	February	March	April	May	June	July	August	September	October	November	December	Totals	Percentages
Causes of Accidents Inside														
Falls of coal,	1	....	....	....	....	....	....	....	....	....	....	....	1	5.56
Falls of roof,	....	1	....	2	....	1	1	1	4	2	1	....	13	72.22
Mine cars,	....	....	....	....	1	....	....	1	....	....	1	....	3	16.66
Explosions of gas and dust,	....	....	1	....	....	....	....	....	....	....	....	....	1	5.56
Totals,	1	1	1	2	1	1	1	2	4	2	2	....	18	100.00
Causes of Accidents Outside														
Cars,	....	....	....	....	1	2	....	....	1	....	1	....	5	83.33
Miscellaneous,	....	....	....	....	....	....	....	....	....	....	....	1	1	16.67
Totals,	....	....	....	....	1	2	....	....	1	....	1	1	6	100.00
Grand totals inside and outside,	1	1	1	2	2	3	1	2	5	2	3	1	24	....

TABLE D.—Classification of Non-fatal Accidents Inside and Outside of Mines

	Months													
	January	February	March	April	May	June	July	August	September	October	November	December	Totals	Percentages
Causes of Accidents Inside														
Falls of coal,	....	....	....	....	1	2	1	....	....	1	....	....	5	9.81
Falls of slate,	....	....	....	....	....	....	1	....	....	....	1	....	2	3.92
Falls of roof,	3	2	1	....	....	1	....	2	6	....	1	1	17	33.33
Mine cars,	5	....	....	2	....	2	....	1	....	1	2	....	13	25.49
Explosions of gas and dust,	....	1	1	....	....	....	....	....	....	1	....	....	3	5.88
Explosions of powder and dynamite,	....	....	1	....	....	....	....	....	2	1	....	1	5	9.81
Premature blasts,	....	1	2	....	....	....	....	....	....	....	....	....	3	5.88
Miscellaneous,	....	....	....	....	....	....	1	....	2	....	....	....	3	5.88
Totals,	8	4	5	2	1	5	3	3	10	4	4	2	51	100.00
Causes of Accidents Outside														
Cars,	1	1	1	1	1	....	....	....	....	1	....	1	7	38.89
Machinery,	1	....	1	....	....	1	....	....	....	....	....	....	3	16.67
Miscellaneous,	....	2	....	1	1	....	....	....	1	2	1	....	8	44.44
Totals,	2	3	2	2	2	1	....	....	1	3	1	1	18	100.00
Grand totals inside and outside,	10	7	7	4	3	6	3	3	11	7	5	3	69	....

TABLE E.—Occupations of Persons Killed or Fatally Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Inside													
Miners,	1	1	....	1	....	1	1	....	1	1	1	....	8
Miners' laborers,	....	....	....	1	....	....	....	1	2	1	....	....	5
Drivers and runners,	....	....	....	....	....	....	....	....	1	....	1	....	2
Doorboys and helpers,	....	....	....	....	1	....	....	....	....	....	....	....	1
Company men,	....	....	....	....	....	....	....	1	....	....	....	....	1
All other employes,	....	....	1	....	....	....	....	....	....	....	....	....	1
Totals,	1	1	1	2	1	1	1	2	4	2	2	....	18
Outside													
All other employes,	....	....	....	....	1	2	....	....	1	....	1	1	6
Totals,	....	....	....	....	1	2	....	....	1	....	1	1	6
Grand totals inside and outside,	1	1	1	2	2	3	1	2	5	2	3	1	24

TABLE F.—Occupations of Persons Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Inside													
Miners,	4	4	2	....	....	2	....	1	4	3	1	2	23
Miners' laborers,	....	....	2	....	1	1	2	....	5	....	1	....	12
Drivers and runners,	2	....	1	1	....	....	....	....	....	1	1	....	6
Doorboys and helpers,	....	....	....	....	....	1	....	1	....	....	1	....	3
Company men,	1	....	....	1	....	....	1	....	1	....	....	....	4
All other employes,	1	....	....	....	....	1	....	1	....	....	....	....	3
Totals,	8	4	5	2	1	5	3	3	10	4	4	2	51
Outside													
Superintendents,	....	....	....	....	....	1	....	....	....	....	....	....	1
Blacksmiths and carpenters,	....	1	1	....	....	....	....	....	1	....	....	....	3
Slatepickers (boys),	....	1			....	....	....	....	....	1	1	....	3
All other employes,	2	1	1	2	2	....	....	....	....	2	....	1	11
Totals,	2	3	2	2	2	1	....	....	1	3	1	1	18
Grand totals inside and outside,	10	7	7	4	3	6	3	3	11	7	5	3	69

TABLE G.—Nationality of Persons Killed or Fatally Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
American,	....	....	....	....	1	....	....	....	1	....	....	1	3
Scotch,	1	....	....	....	....	....	....	....	....	....	....	....	1
Irish,	....	....	1	....	....	....	....	1	....	1	....	....	3
Polish,	....	....	....	1	1	1	....	1	2	....	2	....	8
Italian,	....	1	....	....	....	2	1	....	2	1	1	....	8
Austrian,	....	....	....	1	....	....	....	....	....	....	....	....	1
Totals,	1	1	1	2	2	3	1	2	5	2	3	1	24

TABLE H.—Nationality of Persons Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
American,	3	2	2	1	....	2	....	1	2	1	1	....	15
English,	1	....	1	....	....	....	1	....	....	1	....	....	4
Welsh,	1	....	....	....	....	1	....	....	....	....	....	....	2
Irish,	1	....	1	1	1	....	....	....	....	....	....	....	4
German,	....	....	1	....	....	....	....	....	1	1	....	....	3
Polish,	2	3	2	....	2	2	1	....	5	2	3	2	24
Italian,	1	1	....	....	....	1	....	1	1	1	1	....	7
Slavonian,	....	....	....	1	....	....	....	....	....	....	....	1	2
Lithuanian,	....	1	....	....	....	....	1	1	1	....	....	....	4
Austrian,	....	....	....	....	....	....	....	....	....	1	....	....	1
Russian,	1	....	....	1	....	....	....	....	1	....	....	....	3
Totals,	10	7	7	4	3	6	3	3	11	7	5	3	69

TABLE I.—Operators and mines, kind of openings, type and size of fans, size of furnaces, volume of air produced by fan or furnace per minute, number of splits of air currents, and number of persons employed inside

Names of Operators and Mines	Kind of opening	Gaseous or non-gaseous	Method of ventilation	Diameter of fan in feet	Width of blades in feet	Depth of blades in feet	Number of revolutions per minute	Water gauge developed—in inches	Name of fan	Power used	Area of furnace bars in square feet	Number of splits of air currents	Number of cubic feet of air per minute entering the mine at inlet	Total quantity of air per minute circulating in all the splits in cubic feet	Number of persons employed inside
Pennsylvania Coal Co.															
Old Forge Colliery:															
No. 1 shaft,	Shaft,....	Gaseous,..	Fan,.....	20	6.5	6.5	52	.9	Guibal,	Steam,.....	....	7	100,965	89,380	133
No. 1 slope,	Slope,....	Gaseous,..	Fan,.....	17	5.4	4.11	60	.6		Steam,.....	....	2	57,810	51,800	131
No. 2 shaft,	Shaft,....	Gaseous,..	Fan,.....	20	6.5	5.3	72	.9		Steam,.....	....	6	95,305	87,850	238
Mountain tunnel (Marcy vein),	Drifts,...	Non-gas.,.	Fan,.....	20	6.5	5.4	42	.3		Electricity,	....	3	80,575	78,400	170
Mountain tunnel (Clark vein),															
Central Colliery:															
Laws shaft,	Shaft,..	Gaseous,..	Fan,.....	20	6.5	5.4½	45	.5	Guibal, ...	Steam,.....	....	5	95,040	82,410	226
Laws slope,	Slope,..														
No. 13 shaft,	Shaft,....	Gaseous,..	Fan,.....	20	6.5	5.5	60	.6	Guibal, ...	Steam,.....	....	3	77,000	67,000	105
Barnum Colliery:															
No. 1 shaft,	Shaft,....	Gaseous,..	Fan,.....	20	5.2	5.6	58	.1	Guibal, ..	Steam,...	....	2	60,000	57,000	104
No. 2 shaft,	Shaft,....	Gaseous,..	Fan,.....	20	6.5	5	60	.1			....	3	84,401	74,530	105
No. 3 shaft,	Shaft,....	Gaseous,..	Fan,.....	17	5	5	67	.3			....	3	77,880	70,100	71
Lehigh Valley Coal Co.															
Seneca Colliery:															
Twin,	Shaft,....	Gaseous,..	Fan,.....	20	6	6	72	1.2	Guibal, ..	Steam,...	....	7	120,200	88,100	199
Coxey,	Shaft,....	Gaseous,..	Fan,.....	20	6	6	76	1.2			....	5	90,200	55,200	134
Pittston,	Shaft,....	Gaseous,..	Fan,.....	20	6	6	40	.5			...	1	40,000	30,000	30

William A. Colliery:															
William A,	Shaft,	Non-gas.,	Fan,	18	4.9	5.2	72	.7	Guibal,	Steam,	....	5	90,300	81,300	135
Lawrence shaft,	Shaft,	Non-gas.,	Fan,	18	5	5	80	.5			....	4	94,000	86,000	130
Babylon drift,	Slope,	Non-gas.,	Fan,	12	4	4	75	.3			....	2	32,000	28,000	32
Babylon shaft,	Shaft,	Non-gas.,	Fan,	20	5.2	5.9	65	1.0			....	3	115,000	100,000	116
Campbells Ledge,	Tunnel,	Non-gas.,	Fan,	6	3	1.5	64	.1			....	1	9,600	7,600	20
Jermyn and Co.															
Jermyn Colliery:															
Jermyn No. 1 (slope and shaft),	Shaft,	Gaseous,	Fan,	14	4.5	4	90	1.1	Guibal,	Steam,	....	7	126,150	93,750	339
Jermyn No. 2,	Shaft,	Gaseous,	Fan,	18	4.25	4	90	1	Guibal,	Steam,	....	4	57,950	54,250	190
Jermyn No. 3,	Shaft,	Gaseous,	Fan,	18	4.5	4	90	1	Guibal,	Steam,	....	3	37,250	24,400	56
Jermyn No. 2 slope,	Slope,	Non-gas.,	Furnace,	.....	.....	.....	.....	.....	.....	.....	32	1	6,600	5,500	25
Hillside Coal and Iron Co.															
Consolidated Colliery:															
Consolidated,	Slope,	Non-gas.,	Fan,	16	4	4	85	1.2	Guibal,	Steam,	....	4	48,120	38,120	160
Consolidated,	Shaft,	Non-gas.,	Fan,	12	4	4	80	.6			....	2	36,778	26,700	89
Connell Anthracite Mining Co.															
Connells,	Drift,	Non-gas.,	Fan,	16	4	4	80	.6	Guibal,	Steam,	....	3	40,000	35,500	209
Hudson Coal Co.															
Spring Brook Colliery:															
Spring Brook No. 1,	Slope,	Gaseous,	Fan,	12	3	4	120	.5	Guibal,	Steam,	....	2	39,130	24,950	30
Spring Brook No. 2,	Slope,	Non-gas.,	Fan,	15	4.5	4.8	90	.2	Guibal,	Steam,	....	2	41,920	24,240	12
Spring Brook No. 3,	Slope,	Non-gas.,	Natural,	.....	.....	.....	.....	.....	.....	.....	....	1	8,500	5,000	36
Langcliff Colliery:															
Langcliff,	Shaft,	Non-gas.,	Fan,	17	5	6	60	.2	Guibal,	Steam,	....	5	87,600	45,800	140
Langcliff No. 1,	Drift,	Non-gas.,	Natural,	.....	.....	.....	.....	.....	.....	.....	....	1	15,000	14,200	30
Langcliff No. 2,	Drift,	Non-gas.,	Natural,	.....	.....	.....	.....	.....	.....	.....	....	1	14,600	10,000	20
Langcliff No. 4,	Drift,	Non-gas.,	Natural,	.....	.....	.....	.....	.....	.....	.....	....	1	13,600	12,400	5
Northern Anthracite Coal Co.															
Murrays,	Shaft,	Non-gas.,	Fan,	16	5	6	75	1.3	Guibal,	Steam,	....	2	52,000	50,000	125
Elliott McClure and Co.															
Sibley,	Shaft,	Non-gas.,	Fan,	20	6	5	75	1.3	Guibal,	Steam,	....	8	115,000	110,000	454
O'Boyle-Foy Anthracite Coal Co.															
O'Boyle-Foys,	Shaft,	Non-gas.,	Fan,	18	6	6	60	1.2	Guibal,	Steam,	....	2	35,600	30,800	105
Robertson and Law															
Katy-Did (Victor),	Slope,	Non-gas.,	Fan,	12	3½	3	70	.5	Guibal,	Steam,	....	3	16,000	14,100	65
Delaware, Lackawanna and Western Railroad Co.															
Hallstead Colliery:															
Hallstead (Fan),	Shaft,	Gaseous,	Fan,	18	6.4	4	108	2	Open Guibal,	Steam,	....	6	142,000	93,880	319
Hallstead (Main),	Shaft,	Gaseous,	Fan,	12	3.6	3	80	.7	Open Guibal,	Steam,	....				

TABLE I.—Continued

Names of Operators and Mines	Kind of opening	Gaseous or non-gaseous	Method of ventilation	Diameter of fan in feet	Width of blades in feet	Depth of blades in feet	Number of revolutions per minute	Water gauge developed—in inches	Name of fan	Power used	Area of furnace bars in square feet	Number of splits of air currents	Number of cubic feet of air per minute entering the mine at inlet	Total quantity of air per minute circulating in all the splits in cubic feet	Number of persons employed inside
Austin Coal Co.															
Austin,	Tunnel,	Non-gas.,	Natural,	.....	.....	.....	.....	.....	.....	.....	....	3	52,100	47,000	106
Reliance Coal Co.															
Reliance Colliery:															
Reliance,	Slope,	Non-gas.,	Fan,	18	4	9	60	.3	Guibal,	Steam,	....	2	22,000	20,500	73
Reliance,	Shaft,														
Randall and Schaad Brothers															
Randall and Schaad,	Slope,	Non-gas.,	Steam jet,	.....	.....	.....	.....	.....	.....	Steam,	....	1	9,000	7,500	20

TABLE 1.—Operators, location of collieries, railroads, etc.

Names of Operators and Collieries	County	Name of General Superintendent	Post Office	Name of Superintendent	Post Office	Railroad to Mine
Pennsylvania Coal Co.						
Old Forge,	Lackawanna,	William A. May, General Manager, W. W. Inglis, General Supt.	Scranton,	Joseph J. Jennings, William P. Jennings,	Old Forge, Pittston,	Erie
Central,	Luzerne,					
Barnum,	Luzerne,					
Avoca,	Luzerne,					
Lehigh Valley Coal Co.						
Seneca,	Luzerne,	S. D. Warriner, General Manager,	Wilkes-Barre,	W. D. Owens,	Pittston,	Lehigh Valley
William A,	Lackawanna,					
Jermyn and Co.						
Jermyn Nos. 1, 2 and 3,	Lackawanna,	J. J. Jermyn,	Scranton,	John P. Corcoran,	Rendham,	Erie
Hillside Coal and Iron Co.						
Consolidated,	Luzerne,	V. L. Peterson,	Scranton,	E. D. Caryl,	Pittston,	Erie and N. Y. S. and W
Connell Anthracite Mining Co.						
Connells,	Sullivan,	W. L. Connell,	Scranton,	W. L. Connell,	Scranton,	Lehigh Valley
Hudson Coal Co.						
Spring Brook,	Lackawanna,	C. C. Rose,	Scranton,	E. R. Pettebone,	Dorranceton,	Delaware and Hudson
Langcliff,	Luzerne,					
Northern Anthracite Coal Co.						
Murrays,	Sullivan,	P. J. Murray,	Lopez,	P. J. Murray,	Lopez,	Lehigh Valley
Elliott McClure and Co.						
Sibley,	Lackawanna,	R. W. Reese,	Rendham,	R. W. Reese,	Rendham,	D. L. and W. and Lehigh Valley
O'Boyle-Foy Anthracite Coal Co.						
O'Boyle-Foys,	Sullivan,	M. W. O'Boyle,	Pittston,	M. J. Clemmens,	Murray,	Lehigh Valley
Robertson and Law						
Katy-Did,	Lackawanna,	John M. Robertson,	Moosic,	John M. Robertson,	Moosic,	Erie
Delaware, Lackawanna and Western Railroad Co.						
Hallstead,	Luzerne,	R. A. Phillips,	Scranton,	E. J. Evans,	Scranton,	D. L. and W.
Austin Coal Co.						
Austin,	Lackawanna,	W. G. Robertson,	Scranton,	John J. Cosgrove,	Old Forge,	Lehigh Valley

TABLE 1.—Continued.

Names of Operators and Collieries	County	Name of General Superintendent	Post Office	Name of Superintendent	Post Office	Railroad to Mine
Brookside Coal Co.						
Brookside Washery,	Lackawanna,			M. F. Dolphin,	Scranton,	N. Y. S. and W.
Reliance Coal Co.						
Reliance,	Luzerne,	Theo. A. Hogan,	Pittston,	Jas. F. Horan,	Dunmore,	Lehigh Valley
Randall and Schaad Brothers						
Randall and Schaad,	Sullivan,	W. J. Schaad,	Mildred,	W. J. Schaad,	Mildred,	Lehigh Valley

TABLE 2.—Number of tons of coal mined, number of days worked, number of persons employed, number killed and injured, quantity of powder and dynamite used, etc.

Names of Operators and Collieries	County	Number of tons of coal shipped to market	Number of tons used at collieries for steam and heat	Number of tons sold to local trade and used by employes	Total production of coal in tons	Number of days worked	Number of employes	Number of fatal accidents	Number of non-fatal accidents	Number of kegs of powder used	Number of pounds of dynamite used	Number of horses and mules
Pennsylvania Coal Co.												
Old Forge,	Lackawanna,	613,971	50,513	1,070	665,554	263	1,395	2	7	29,941	13,099	89
Central,	Luzerne,	373,806	16,149	4,685	394,640	231	892	3	3	11,533	1,585	49
Barnum,	Luzerne,	361,429	11,593	3,166	376,188	252	833	4	8	13,997	4,973	95
Avoca,	Luzerne,	4,420	456	565	5,441	7	269	......	......	70	22	36
		1,353,626	78,711	9,486	1,441,823	......	3,389	9	18	55,541	19,679	269
Central Washery,	Luzerne,	67,560	2,883	....	70,443	......	65	......	......	....	....	......
Totals,	....	1,421,186	81,594	9,486	1,512,266	......	3,454	9	18	55,541	19,679	269
Lehigh Valley Coal Co.												
Seneca,	Luzerne,	199,588	39,899	3,272	242,759	219	517	1	7	12,486	20,000	77
William A.	Lackawanna,	280,358	38,151	4,157	322,666	253	584	6	9	10,517	24,755	98
		479,946	78,050	7,429	565,425	......	1,101	7	16	23,003	44,755	175
Lawrence Washery,	Lackawanna,	17,695	....	....	17,695	......	11	......	......	....	....	......
Totals,	....	497,641	78,050	7,429	583,120	......	1,112	7	16	23,003	44,755	175
Jermyn and Co.												
Jermyn No. 2,	Lackawanna,	131,307	5,383	2,895	139,585	109	1,127	1	4	6,400	6,550	32
Jermyn Nos. 1 and 3,		200,405	10,576	2,556	213,537	141		2	2	12,676	5,300	40
Totals,	....	331,712	15,959	5,451	353,122	......	1,127	3	6	19,076	11,850	72

TABLE 2.—Continued

Names of Operators and Collieries	County	Number of tons of coal shipped to market	Number of tons used at collieries for steam and heat	Number of tons sold to local trade and used by employes	Total production of coal in tons	Number of days worked	Number of employes	Number of fatal accidents	Number of non-fatal accidents	Number of kegs of powder used	Number of pounds of dynamite used	Number of horses and mules
Hillside Coal and Iron Co.												
Consolidated,	Luzerne,	194,006	11,233	2,927	208,166	213	477	2	4	7,811	6,910	60
Consolidated Washery,		2,479	....	....	2,479	......	3	....	....	....	....	......
Totals,	....	196,485	11,233	2,927	210,645	......	480	2	4	7,811	6,910	60
Connell Anthracite Mining Co.												
Connells,	Sullivan,	156,161	18,250	1,721	176,132	229	330	1	6	1,488	5,419	9
Hudson Coal Co.												
Spring Brook,	Lackawanna,	51,883	6,375	908	59,166	124	248	....	3	3,877	3,930	29
Langcliff,	Luzerne.	93,034	15,250	1,688	109,972	133	298	1	4	5,065	2,066	59
Totals,	....	144,917	21,625	2,596	169,138	......	546	1	7	8,942	5,996	88
Northern Anthracite Coal Co.												
Murrays,	Sullivan,	128,319	5,705	1,572	135,596	173	200	....	1	4,340	700	24
Elliott McClure and Co.												
Sibley,	Lackawanna,	103,115	14,000	2,099	119,214	124	615	1	5	6,053	3,075	43
O'Boyle-Foy Anthracite Coal Co.												
O'Boyle-Foys,	Sullivan,	61,151	7,200	900	69,251	144	163	....	1	2,485	200	10
Robertson and Law												
Katy-Did,	Lackawanna,	52,445	4,500	11,581	68,526	316	115	....	....	1,278	16,425	18
Delaware, Lackawanna and Western Railroad Co.												
Hallstead,	Luzerne,	40,475	26,757	862	68,094	135	429	....	1	2,817	6,487	42

Austin Coal Co. Austin,	Lackawanna,	30,235	5,200	2,350	37,785	151	160	......	......	1,475	2,197	12
Brookside Coal Co. Brookside Washery,	Lackawanna,	32,526	1,800	966	35,292	......	23	......	1	......	......	......
Reliance Coal Co. Reliance,	Luzerne,	14,773	10,950	1,535	27,258	268	115	......	3	2,075	11,600	15
Randall and Schaad Brothers Randall and Schaad,	Sullivan,	3,760	1,000	958	5,718	141	26	......	......	373	......	4
Grand totals,	......	3,214,901	303,823	52,433	3,571,157	......	8,895	24	69	136,757	135,293	841

TABLE 2.—Part 2

Names of Operators	County	Number of Boilers					Locomotives			Number of steam engines of all classes	Total horse power	Number of pumps delivering water to surface	Capacity in gallons per minute	Quantity delivered to surface per minute—gallons	Number of electric dynamos	Number of air compressors
		Cylindrical	Horse power	Tubular	Horse power	Total horse power	Steam	Air	Electric							
Pennsylvania Coal Co.,	Lackawanna, Luzerne,	2	60	32	6,120	6,180	8	......	26	73	3,535	16	18,121	7,462	3	1
Lehigh Valley Coal Co.,	Lackawanna, Luzerne,	......	....	23	4,500	4,500	2	......	3	40	3,350	13	11,300	8,500	1	1
Jermyn and Co.,	Lackawanna,	15	300	7	1,050	1,350	9	......	......	20	1,815	2	3,500	1,900	......	......
Hillside Coal and Iron Co.,	Luzerne,	11	220	3	240	460	3	......	......	12	600	1	490	465	......	......
Connell Anthracite Mining Co.,	Sullivan,	......	....	5	1,050	1,050	......	......	7	10	825	1	400	250	3	......
Hudson Coal Co.,	Lackawanna, Luzerne,	9	270	8	985	1,255	2	......	......	30	1,175	3	2,300	1,100	......	1
Northern Anthracite Coal Co.,	Sullivan,	......	....	4	400	400	......	......	......	5	400	1	1,174	587	......	......
Elliott McClure and Co.,	Lackawanna,	......	....	3	1,200	1,200	......	......	......	19	900	1	2,500	1,500	......	1
O'Boyle-Foy Anthracite Coal Co.,	Sullivan,	......	....	3	550	550	......	......	......	8	450	1	60	40	......	......
Robertson and Law,	Lackawanna,	......	....	6	460	460	1	......	......	9	245	3	450	250	......	1
Delaware, Lackawanna and Western Railroad Co.,	Luzerne,	23	460	4	540	1,000	......	......	......	8	690	6	9,660	4,000	......	......
Austin Coal Co.,	Lackawanna,	7	140	3	450	590	1	......	......	9	270	1	200	150	......	2
Brookside Coal Co.,	Lackawanna,	......	....	4	300	300	......	......	......	4	178	....	....	....	......	......
Reliance Coal Co.,	Luzerne,	3	450	....	....	450	......	......	......	3	430	2	480	240	......	1
Randall and Schaad Brothers,	Sullivan,	......	....	1	80	80	......	......	......	1	60	2	300	100	......	......
Totals,	....	70	1,900	106	17,925	19,825	26	......	36	251	14,923	53	50,935	26,544	7	8

Table 3.—Number of each class of employes inside and outside of mines

Names of Operators and Collieries	County	Inside											Outside									Grand total inside and outside
		Mine foremen	Assistant mine foremen	Fire bosses and assistants	Miners	Miners' laborers	Drivers and runners	Doorboys and helpers	Pumpmen	Company men	All other employes	Total inside	Superintendents	Foremen	Blacksmiths and carpenters	Engineers and firemen	Slate pickers (boys)	Slate pickers (men)	Bookkeepers and clerks	All other employes	Total outside	
Pennsylvania Coal Co																						
Old Forge,	Lackawanna,	3	5	1	451	337	117	42	3	101	29	1,089	....	1	29	23	104	36	2	111	306	1,395
Central,	Luzerne,	2	4	1	224	223	52	14	3	93	16	632	....	1	18	19	60	22	1	139	260	892
Barnum,		2	2	2	234	199	106	11	1	46	43	646	....	1	10	14	66	19	4	73	187	833
Avoca,		1	1	....	77	77	21	4	2	3	8	194	....	1	7	6	26	3	1	31	75	269
		8	12	4	986	836	296	71	9	243	96	2,561	....	4	64	62	256	80	8	354	828	3,389
Central Washery,	Luzerne,	....	....	....	......	......	......	......	......	......	......	......	....	1	......	2	......	10	......	52	65	65
Totals,		8	12	4	986	836	296	71	9	243	96	2,561	....	5	64	64	256	90	8	406	893	3,454
Lehigh Valley Coal Co.																						
Seneca,	Luzerne,	1	3	4	145	60	54	14	11	71	......	363	....	1	11	26	26	10	3	77	154	517
William A,	Lackawanna,	3	2	4	169	86	75	6	12	74	......	431	1	1	14	20	20	6	3	88	153	584
		4	5	8	314	146	129	20	23	145	......	794	1	2	25	46	46	16	6	165	307	1,101
Lawrence Washery,	Lackawanna,	....	....	....	......	......	......	......	......	......	......	......	....	1	......	......	......	......	......	10	11	11
Totals,		4	5	8	314	146	129	20	23	145	......	794	1	3	25	46	46	16	6	175	318	1,112
Jermyn and Co.																						
Jermyn Nos. 1, 2 and 3,	Lackawanna,	2	....	8	335	279	120	26	5	136	......	911	2	1	7	8	81	30	7	80	216	1,127
Hillside Coal and Iron Co.																						
Consolidated,	Luzerne,	2	....	....	139	120	57	4	1	3	35	361	....	1	8	9	32	2	2	62	116	477
Consolidated Washery,		....	....	....	......	......	......	......	......	......	......	......	....	....	......	1	......	......	......	2	3	3
Totals,		2	....	....	139	120	57	4	1	3	35	361	....	1	8	10	32	2	2	64	119	480

TABLE 3.—Continued

Names of Operators and Collieries	County	Inside											Outside										
		Mine foremen	Assistant mine foremen	Fire bosses and assistants	Miners	Miners' laborers	Drivers and runners	Doorboys and helpers	Pumpmen	Company men	All other employes	Total inside	Superintendents	Foremen	Blacksmiths and carpenters	Engineers and fi-emen	Slate pickers (boys)	Slate pickers (men)	Bookkeepers and clerks	All other employes	Total outside	Grand total inside and outside
Connell Anthracite Mining Co.																						
Connells,	Sullivan,	1	1	....	95	37	......	5	8	14	48	209	1	1	7	13	25	7	3	64	121	330
Hudson Coal Co.																						
Spring Brook,	Lackawanna,	1	....	....	54	70	30	3	1	6	2	167	....	1	3	8	14	15	1	39	81	248
Langcliff,	Luzerne,	1	1	1	80	70	29	2	3	19	6	212	....	1	7	13	11	10	3	41	86	298
Totals,		2	1	1	134	140	59	5	4	25	8	379	....	2	10	21	25	25	4	80	167	546
Northern Anthracite Coal Co.																						
Murrays,	Sullivan,	1	....	....	45	45	15	3	1	5	10	125	1	2	3	5	20	15	3	26	75	200
Elliott McClure and Co.																						
Sibley,	Lackawanna,	1	2	2	175	125	62	8	3	76	......	454	1	1	7	7	72	15	3	55	161	615
O'Boyle-Foy Anthracite Coal Co.																						
O'Boyle-Foys,	Sullivan,	1	....	....	45	40	6	3	2	8	......	105	1	1	3	5	17	6	1	24	58	163
Robertson and Law																						
Katy-Did,	Lackawanna,	1	....	....	20	20	8	1	2	3	10	65	1	1	2	9	12	3	2	20	50	115
Delaware, Lackawanna and Western Railroad Co.																						
Hallstead,	Luzerne,	1	....	2	92	88	45	7	4	19	61	319	....	1	6	19	29	......	1	54	110	429

Austin Coal Co. Austin,	Lackawanna,	1	1	1	40	28	12	2	2	7	12	106	1	1	4	6	17	6	2	17	54	160
Brookside Coal Co. Brookside Washery,	Lackawanna,	....	....	....	......	......	......	......	......	......	......	......	....	1	2	4	3	......	1	12	23	23
Reliance Coal Co. Reliance,	Luzerne,	1	....	1	25	25	4	......	2	7	8	73	....	1	3	6	10	......	2	20	42	115
Randall and Schaad Brothers Randall and Schaad,	Sullivan,	1	1	....	16	......	2	......	......	......	......	20	1	....	1	2	......	2	......	......	6	26
Grand totals,		27	23	27	2,461	1,929	815	155	66	691	288	6,482	10	22	152	225	645	217	45	1,097	2,413	8,895

TABLE 3.—Part 2

Names of Operators and Collieries	County	Number of Days Worked in Breaker												
		January	February	March	April	May	June	July	August	September	October	November	December	Total
Pennsylvania Coal Co.														
Old Forge,	Lackawanna,	22	16	21	22	23	25	22	23	19	24	24	22	263
Central,	Luzerne,	....	10	20	23	25	25	23	22	20	21	22	20	231
Barnum,		21	17	22	22	22	24	23	22	20	19	20	20	252
Avoca,		7	....	....	....	....	....	....	....	....	....	....	....	7
Lehigh Valley Coal Co.														
Seneca,	Luzerne,	21	17	18	19	18	17	17	18	17	19	19	18	218
William A,	Lackawanna,	25	20	18	20	21	23	21	22	19	22	21	20	252
Jermyn and Co.														
Jermyn No. 2,	Lackawanna,	22	22	24	23	18	....	....	....	....	....	....	....	109
Jermyn Nos. 1 and 3,		....	....	....	....	....	8	24	20	22	23	21	23	141
Hillside Coal and Iron Co.														
Consolidated,	Luzerne,	21	18	19	19	20	20	17	19	17	20	4	19	213
Connell Anthracite Mining Co.														
Connells,	Sullivan,	24	17	18	17	19	12	17	21	17	23	22	21	228
Hudson Coal Co.														
Spring Brook,	Lackawanna,	9	8	9	10	10	11	13	11	10	12	9	11	123
Langcliff,	Luzerne,	14	9	1	11	9	12	12	13	11	3	13	13	121
Northern Anthracite Coal Co.														
Murrays,	Sullivan,	17	13	15	11	11	14	10	11	9	22	21	19	173
Elliott McClure and Co.														
Sibley,	Lackawanna,	....	....	....	....	....	9	19	19	15	21	20	21	124
O'Boyle-Foy Anthracite Coal Co.														
O'Boyle-Foys,	Sullivan,	15	15	16	10	11	7	....	8	11	17	17	17	144

Robertson and Law Katy-Did,	Lackawanna,	27	25	28	29	28	28	22	26	26	24	26	27	316
Delaware, Lackawanna and Western Railroad Co. Hallstead,	Luzerne,	....	....	....	....	....	17	15	23	19	24	22	15	135
Austin Coal Co. Austin,	Lackawanna,	18	16	20	21	18	11	....	....	4	14	15	14	151
Reliance Coal Co. Reliance,	Luzerne,	25	23	17	18	25	25	28	29	24	26	25	3	268
Randall and Schaad Brothers Randall and Schaad,	Sullivan,	23	21	15	....	....	....	....	....	15	23	23	21	141

TABLE 4.—Fatal accidents inside and outside of mines

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Number of widows	Number of orphans	Name of Mine	County	Nature and Cause of Accident in Brief
Jan.	15	Hugh Goodwin,	Scotch,	Miner,	55	M	1	3	Barnum No. 3,	Luzerne,	Killed by fall of top coal at face of breast while taking it down.
Feb.	13	Christian Vinchenci,	Italian,	Miner,	29	S.	....	....	William A,	Lackawanna,	Back broken by fall of rock at face.
March	23	Martin Flynn,	Irish,	Rockman,	35	M	1	....	Barnum No. 2,	Luzerne,	Burned by gas on face, shoulders and hands. Died April 3.
April	17	Michael Sodeck,	Austrian,	Laborer,	58	M	1	4	Consolidated Shaft,	Luzerne,	Killed by fall of roof in the face of their working place.
	17	John Kuske,	Polish,	Miner,	44	M.	1	....			
May	4	Joseph Oreckesky,	Polish,	Laborer,	36	M.	1	6	Jermyn No. 1,	Lackawanna,	Instantly killed by rock car. Outside.
	29	Michael Gallagher,	American,	Doortender,	16	S.	....	....	Central Laws Shaft,	Luzerne,	Left leg cut and right leg bruised. Died July 28. Fell asleep at door and was run over by cars.
June	8	Frank Rutcofsky,	Polish,	Miner,	31	M	1	4	Lawrence,	Lackawanna,	Instantly killed by fall of soapstone that he had been warned to take down.
	14	John O'Meaney,	Italian,	Laborer,	29	S.	....	....	Central,	Luzerne,	Chest bruised. Caught between cars. Outside. Died June 16.
	20	Andrew Spaniel,	Italian,	Laborer,	35	M.	1	6	Old Forge Drift,	Lackawanna,	Instantly killed by cars. Outside.
July	15	Peter Tuitilege,	Italian,	Miner,	42	S.	....	....	Lawrence,	Lackawanna,	Instantly killed by fall of roof at face of working place.
Aug.	3	Adam Potchesky,	Polish,	Laborer,	56	M	1	1	Lawrence,	Lackawanna,	Killed by fall of rock while loading a car.
	6	John J. Hennigan,	Irish,	Co. man,	45	M.	1	5	Jermyn No. 1,	Lackawanna,	Fatally injured by falling from the bumper of car.
Sept.	13	Raffella Astorine,	Italian,	Laborer,	45	M.	1	1	Sibley,	Lackawanna,	Fatally injured by jumping from a car. Outside. Died September 14.
	19	Paul Mahalsky,	Polish,	Miner,	27	S.	....		Lawrence,	Lackawanna,	Killed instantly by fall of roof at face.
	26	William Chitnavage,	Polish,	Laborer,	20	S.	....	....	Seneca,	Luzerne,	Killed instantly by fall of roof at face.
	27	Thos. Morgan,	American,	Runner,	29	M.	1	1	Barnum No. 2,	Luzerne,	Killed instantly by fall of roof at face.
	30	Amito Capo,	Italian,	Laborer,	42	S.	....	....	Jermyn No. 2,	Lackawanna,	Fatally injured by fall of rock at face. Died the next morning.
Oct.	1	Patrick McGeary,	Irish,	Miner,	42	M.	1	1	Barnum No. 2,	Luzerne,	Killed instantly by fall of roof at face.
	11	**Toney** Lazarre,	Italian,	Laborer,	18	S.	....	....	Connells,	Sullivan,	Small piece of rock fell and cut him on foot; blood poison set in and he died from lock-jaw October 20.
Nov.	**9**	**Frank** Miller,	Polish,	Driver,	16	S.	....	....	Old Forge No. 1,	Lackawanna,	Fatally injured while detaching mule from car.

Nov.	11	Dominick Lina, ...	Italian,......	Miner, ...	39	M.	1	....	Babylon, ...	Luzerne,.......	Killed by fall of rock at face. He neglected to take it down.
	29	Michael Moskovitz, ...	Polish,.......	Laborer, ...	25	S.	....	....	Langcliff, ...	Luzerne,.......	Killed instantly. Skull crushed by being caught by runaway car. Outside.
Dec.	4	Thos. Mulrooney, ...	American,...	Ashman, ...	27	S.	....	....	Central, ...	Luzerne,.......	Found dead in ash pit. Overcome by impure air. Outside.

TABLE 5.—Non-fatal accidents inside and outside of mines

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Name of Mine	County	Nature and Cause of Accident in Brief
Jan.	2	Wm. Walukas,	American,	Runner,	17	S.	Langcliff,	Luzerne,	Arm sprained. Caught between car and roof.
	5	Frank Tomaskie,	Russian,	Laborer,	32	M.	Consolidated Shaft,	Luzerne,	Contusion of back and shoulders and chest slightly bruised. He fell from train of cars. Outside.
	7	John Secoskie,	Polish,	Miner,	23	S.	Seneca,	Luzerne,	Leg broken and head bruised by colliding with car while running from shot.
	11	Patten Taylor,	English,	Miner,	64	M.	Old Forge No. 2 Shaft,	Lackawanna,	Two ribs and right foot fractured. A small piece of soapstone fell on him.
	12	Maria Centilla,	Italian,	Miner,	32	S.	Jermyn No. 2,	Lackawanna,	Leg broken by fall of rock.
	12	Thos. McNalley,	Irish,	Miner,	43	M.	Old Forge No. 2,	Lackawanna,	Hip and shoulders fractured and otherwise bruised and cut by fall of roof.
	16	Michael Lavelle,	American,	Driver,	19	S.	Murrays,	Sullivan,	Leg broken by falling from trip of cars.
	19	John Jones,	Welsh,	Tracklayer,	21	S.	Lawrence,	Lackawanna,	Left leg fractured. Caught between two cars.
	22	Orason Hendershot,	American,	Laborer,	18	S.	Sibley,	Lackawanna,	Bone in leg broken and foot bruised. He tried to retard a rolling drum shaft. Outside.
	30	Mike Bologa,	Polish,	Footman,	24	S.	Jermyn No. 2,	Lackawanna,	Arm broken. Caught between car and carriage.
Feb.	2	Louis Hollenback,	American,	Carpenter,	47	M.	Central,	Luzerne,	Arm broken. He fell while pulling on a rope. Outside.
	13	Toney Reity,	Italian,	Laborer,	36	M.	Brookside Washery,	Lackawanna,	Compound fracture of left leg. Caught by a trip of cars that bumped. Outside.
	18	John Checker,	Polish,	Miner,	27	S.	Consolidated Shaft,	Luzerne,	Abdomen bruised and pelvis fractured by fall of rock.
	19	John Smith,	Lithuanian,	Miner,	26	S.	Seneca,	Luzerne,	Hands, face and shoulders burned by gas.
	21	John Gingel,	Polish,	Miner,	28	S.	Spring Brook,	Lackawanna,	Bruised and cut on body by fall of bony coal.
	23	George Severa,	Polish,	Miner,	38	M.	Jermyn No. 1,	Lackawanna,	Face and eye lacerated by premature blast.
	25	James Gannon,	American,	Slatepicker,	17	S.	Consolidated,	Luzerne,	Hip bruised and swollen. He fell from breaker to ground, a distance of 20 feet. Outside.

March	5	Joe Anshon,	Polish,	Laborer,	28	M.	Old Forge Drift,	Lackawanna,	Shot in face and breast. He drove a pick in a concealed stick of dynamite.
	13	Peter Holke,	Polish,	Miner,	22	S.	Seneca (Columbia),	Luzerne,	Back and hips slightly injured by a premature explosion.
	18	Harold Becktold,	German,	Oiler,	16	S.	Reliance,	Luzerne,	Legs and arms broken and body bruised. A screw in a revolving shaft caught in his pocket and wound him around the shaft. Outside.
	19	Martin Allen,	Irish,	Miner,	50	M.	Consolidated Slope,	Luzerne,	Hole in leg and other marks on back and side. While retreating his light went out and he was caught by coal from the blast.
	23	Fred Porkorney,	American,	Driver,	18	S.	Barnum No. 2,	Luzerne,	Face and hands burned by gas.
	26	John B. Randall,	American,	Carpenter,	44	M.	Central,	Luzerne,	Leg broken. Caught between locomotive tender and mine car that jumped the track. Outside.
	28	Herbert Harrison,	English,	Laborer,	24	S.	Lawrence,	Lackawanna,	Thigh fractured and abdomen bruised by fall of rock at face.
April	4	John O'Brien,	Irish,	Trackman,	57	M.	Barnum No. 3,	Luzerne,	Arm lacerated. He became confused and was caught by a trip of loaded mine cars.
	11	John Williams,	American,	Driver,	19	S.	Old Forge No. 2 Shaft,	Lackawanna,	Leg fractured while coupling cars.
	15	John Hodock,	Slavonian,	Footman,	40	M.	Central,	Luzerne,	Sternum and ribs fractured. Caught by cage in breaker shaft. Outside.
	29	Mike Orbanick,	Russian,	Laborer,	20	S.	Jermyn No. 2,	Lackawanna,	Legs broken and injured internally. Caught by a loaded car. Outside.
May	23	John Delesky,	Polish,	Laborer,	30	S.	Barnum No. 3,	Luzerne,	Left leg cut, scalp wounded and two ribs broken by fall of top coal.
	27	Daniel McArdle,	Irish,	Tracklayer,	32	S.	William A,	Lackawanna,	Eye punctured by a chip from cast iron that he was breaking with a hammer. Outside.
	31	Frank Washcavage,	Polish,	Laborer,	17	S.	Lawrence,	Lackawanna,	Leg broken by falling from mine car. Outside.
June	5	Lewis Topaluskie,	Polish,	Miner,	42	M.	William A,	Lackawanna,	Nose and upper face bone fractured and small finger on right hand severed. Caught by fall of top coal while replacing a prop.
	7	Willis R. Reese,	Welsh,	Superintendent,	45	M.	Sibley,	Lackawanna,	Shoulders dislocated, left arm broken and compound fracture of right arm. A slide on the culm dump threw him into conveyor line. Outside.
	11	Lewis Hatton,	American,	Motor-helper,	20	S.	Connells,	Sullivan,	Three ribs broken by being squeezed between car and prop.
	21	Frank Dresky,	American,	Doorboy,	16	S.	Old Forge No. 1 Shaft,	Lackawanna,	Knee cap fractured. Squeezed between cars while coupling them.
	24	John Korzol,	Polish,	Miner,	34	M.	Sibley,	Lackawanna,	Large toe severed by fall of bony coal at face.
	25	David Feeby,	Italian,	Laborer,	21	S.	Seneca,	Luzerne,	Left leg broken. Caught by fall of saddle rock at face.
July	1	Stanley Drink,	Lithuanian,	Laborer,	26	S.	Babylon,	Luzerne,	Leg fractured by piece of coal barred from the rib.
	16	John Goodalenskie,	Polish,	Laborer,	32	M.	Hallstead,	Luzerne,	Leg broken by fall of soapstone at face.
	23	Robert Bosley,	English,	Tracklayer,	51	M.	Spring Brook,	Lackawanna,	Left eye punctured by a piece of steel rail that he was cutting.

TABLE 5. —Continued

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Name of Mine	County	Nature and Cause of Accident in Brief
Aug.	19	George Dringinis,	Lithuanian,	Miner,	36	M.	Seneca,	Luzerne,	Back injured and leg broken by a fall of rock. He was trying to bar rock down.
	20	Anson Weed,	American,	Rockman,	40	M.	Connells,	Sullivan,	Leg broken by a fall of rock.
	21	Joe Natorie,	Italian,	Doorboy,	16	S.	Old Forge No. 2 Shaft,	Lackawanna,	Leg broken. He was thrown from the bumper of a car.
Sept.	3	Sam Cositine,	Italian,	Miner,	52	M.	William A,	Lackawanna,	Leg fractured by fall of rock while replacing a prop.
	3	Peter Neper,	American,	Ropeman,	25	M.	Jermyn No. 2,	Lackawanna,	Knee fractured while repairing a pulley; he was caught by the rope.
	5	Mike Chissick,	Lithuanian,	Miner,	36	M.	Babylon,	Luzerne,	Leg broken by a rock sliding on him.
	6	Thomas Tabo,	Polish,	Laborer,	38	M.	O'Boyle-Foys,	Sullivan,	Leg broken by fall of rock. He entered the place contrary to the miner's request.
	12	Mike Weskusha,	Polish,	Miner,	30	M.	Reliance,	Luzerne,	Both men had face and hands burned and bruised. They were trying to force a cartridge into a hole of less diameter and a premature explosion occurred.
	12	Joe Renues,	Polish,	Laborer,	28	S.			
	16	Thomas Howell,	American,	Laborer,	33	S.	Langcliff,	Luzerne,	Compound fracture of leg and ankle dislocated. While standing a prop a piece of bone fell on him.
	27	Stanley Clovis,	Polish,	Laborer,	31	M.	Barnum No. 2,	Luzerne,	Hips squeezed and bladder injured by fall of roof.
	28	John Adamovich,	Russian,	Laborer,	21	S.	Barnum No. 3,	Luzerne,	Right leg broken above knee, left leg broken near ankle and small bone in left wrist broken by fall of rock.
	30	John Mayochuck,	Polish,	Miner,	49	M.	Jermyn No. 1,	Lackawanna,	Leg broken. While mining out a shot the dividing rock fell.
	30	Nathan Stivers,	German,	Carpenter,	34	M.	Langcliff,	Luzerne,	Compound fracture of left leg, contusion and laceration of right leg. Caught between old timber while tearing down breaker plane. Outside.
Oct.	16	John Peltock,	Polish,	Miner,	30	M.	Seneca,	Luzerne,	Leg broken and face seriously cut. He was forcing a cartridge with a drill into too small a hole and it exploded.

Oct.	16	Joseph Orodensky, ...	Polish,.......	Driver, ...	26	S.	Sibley, ...	Lackawanna,..	Ribs fractured. He was riding on bumper of car, the car was derailed and he was caught between it and gob.
	18	Raphal Spenalla, ...	Italian,......	Miner, ...	40	M.	Seneca, ...	Luzerne,.......	Slightly burned on face, neck and hands by gas. He entered his place before it was examined.
	21	John Rodka, ...	German,.....	Laborer, ...	45	M.	Connells, ...	Sullivan,.......	Leg broken. He fell from his seat in a "coal boot." Outside.
	23	Wm. Wheatley, ...	American,...	Spragger, ...	18	S.	Connells, ...	Sullivan,.......	Hands smashed while spragging a car. Caught between sprag and frame of car. Outside.
	23	Wm. G. Nicholson, ..	English,.....	Slatepicker, ...	14	S.	Sibley, ...	Lackawanna,..	Bruised about body. He got out on a beam, attempted to run on a plank, lost his footing and fell 15 feet to chute below. Outside.
	25	Phillip Stortz, ...	Austrian,....	Miner, ...	35	M.	Barnum No. 3, ...	Luzerne,.......	Small bone broken in calf of leg while taking down a piece of top coal.
Nov.	5	Chas. Krupenoski, ...	Polish,.......	Driver, ...	17	S.	Spring Brook, ...	Lackawanna,..	Thumb fractured while taking a sprag from car.
	13	Arthur Herst, ...	American,...	Doorboy, ...	16	S.	Connells, ...	Sullivan,.......	Right leg broken below knee, skin torn from different parts of body and injured internally. He delayed opening doors and was struck by cars.
	14	Adam Moluskie, ...	Polish,.......	Slatepicker, ...	14	S.	Barnum, ...	Luzerne,.......	Left leg broken and knee badly lacerated. He fell in chute in breaker. Outside.
	14	De Leuga Gondelegar,	Italian,......	Laborer, ...	27	S.	Old Forge No. 2 Shaft,	Lackawanna,..	Fracture of spine. Caught by fall of roof. He entered place before it was examined.
	21	Joe Mergil, ...	Polish,.......	Miner, ...	38	M.	Babylon, ...	Luzerne,.......	Compound fracture of lower jaw. He was struck while pulling some soapstone down.
Dec.	4	John Petrushen, ...	Polish,.......	Miner, ...	33	M.	Connells, ...	Sullivan,.......	Injured internally. Caught by fall of rock.
	10	William Teepaw, ...	Slavonian,...	Runner, ...	23	S.	Barnum, ...	Luzerne,.......	One finger amputated and two others squeezed while coupling cars. Outside.
	27	Alexander Seokofski,..	Polish,.......	Miner, ...	29	M.	Langcliff, ...	Luzerne,.......	Legs and arms burned. A spark from his lamp ignited loose powder that he was handling.

FATAL ACCIDENTS

Falls of Coal, Slate and Roof

January 15, Barnum No. 3 Colliery, Hugh Goodwin, Scotch, miner, was killed while robbing pillars. He had drilled a hole in the top coal, but before blowing it down was cleaning up the loose coal under it when the top bench fell on him.

February 13, William A. Colliery, Christian Vinchenci, Italian, miner, was fatally injured. He was barring the coal in the face after firing a shot, when the top rock, which had a "slip," fell on him. He died on February 17.

April 17, Consolidated Colliery, John Kusko, Polish, miner, and Mike Sodeck, Austrian, laborer, were fatally injured. They had finished their chamber and drilled the first hole to start back on the pillars, when a fall of rock occurred. Kusko was instantly killed and Sodeck died April 21. The place was very well timbered, but the roof was too soft to hold.

June 8, William A. Colliery, Lawrence, Clark Drift, Frank Rutcofsky, Polish, miner, was crushed and killed by the fall of a saddle rock. He was working alone, re-opening an old chamber, preparatory to robbing it, when the rock fell on him. The foreman said that he had told him to take it down. His body was found by the runner.

July 15, William A. Colliery, Lawrence, Clark Drift, Peter Tuitilege, Italian, miner, was killed by fall of roof. He and another miner and laborer were replacing a prop that had been knocked out. They knew that the roof was working above them, but went ahead and the roof fell.

August 3, William A. Colliery, Lawrence, Babylon Drift, Adam Potchesky, Polish, laborer, working on night shift with his miner, was killed by a fall of roof while loading his car. The miner was 50 feet ahead of him in the face (which had a very bad roof) and kept him back because he considered it the safest place. The miner and the foreman had examined the roof and considered it safe.

September 19, William A. Colliery, Lawrence, Babylon Drift, Paul Mahalsky, Polish miner, was killed by a fall of roof while robbing pillars. He had twice replaced a prop under a bad piece of roof that had been knocked out by blasts. Mahalsky then urged his companions to drill and fire a hole before replacing the prop. While this was being done he stood under the "bad roof" to load the car when a fall occurred.

September 26, Seneca Colliery, Columbia Shaft, William Chitenavage, Polish, laborer, was instantly killed by a fall of rock, 5 by 9 feet and from a feather edge to 10 inches thick. The fire boss and miner had examined the roof and considered it safe.

September 27, Barnum No. 2, Thomas Morgan, American, runner, was instantly killed in the Marcy vein, by a fall of roof, 25 by 12 feet and 8 inches thick. He was about to follow the driver out of the chamber, where he had delivered an empty car to two miners and two laborers, when the roof fell on him. The others escaped. The miner had previously sounded the roof and considered it safe.

September 30, Jermyn No. 2, Amito Capo, Italian, laborer, employed in the Clark vein, was caught about 12.30 P. M. by a fall of soap stone and received injuries from which he died the next morning. The miner said he had sounded this particular piece of roof at 9 A. M. and considered it safe. The foreman and the fire boss stated that the miner had been ordered to take the roof down.

October 1, Barnum No. 2, Patrick McGeary, Irish, miner, was killed by a fall of roof while robbing pillars in Marcy vein. He and another miner were sitting near the face on the gob waiting for cars. The other miner went back for oil and was absent about a minute when a fall occurred, killing McGeary. The rock was 15 feet square and 10 inches thick on one side and tapered to a feather edge. The miners and the fire boss had examined the roof and considered it safe.

October 11, Connells Colliery, Toney Lazarre, Italian, laborer, was injured by a small piece of rock falling on him. He received a cut, which extended across the toes of his left foot, the wound was neglected, and he died of blood poison October 20.

November 11, William A. Colliery, Babylon, Dominick Lina, Italian, miner, was killed by a fall of rock in Red Ash vein. He was last seen on the morning of the 11th by the Assistant Foreman and the topping boss. To them he expressed his intention of going home early. On the morning of the 12th the miner in the adjoining room discovered his coat and dinner pail, made a search and found him under a large stone, which had fallen and completely covered him.

Mine Cars

May 4, Jermyn No. 1, Joseph Oreckesky, Polish, laborer, was killed by cars. He was employed at foot of plane, outside. He was handling a trip of cars and ran ahead to turn the latch, but before he could do this the cars struck him.

May 29, Central Colliery, Laws Shaft, Michael Gallagher, American, doortender, was fatally injured. He fell asleep at his door and was not discovered until the motor was almost upon him. The brakeman attempted to rescue him, but the boy's left leg was caught and he died from the injury July 28.

June 14, Central Colliery, John O'Meaney, Italian, laborer, was fatally injured by a rock car. He was working on a rock dump, outside, and failed to turn the latches and was struck by the car. He died at the Hospital on the 16th.

June 20, Old Forge Colliery, Mountain Drift, Andrew Spaniel. Italian, laborer, was instantly killed by being struck by a trip of cars, outside. He could not remove the car so he got under it to look, presumably, for a jammed sprag. The motorman did not see him and ran into the car with a trip.

August 6, Jermyn No. 1, John J. Hennigan, Irish, company man, was fatally injured by cars. He was riding on the bumper of a car when taking the "loaded" from a chamber. In some way his foot caught and he was thrown under the car, which passed over his body.

September 13, Sibley Colliery, Raffella Astorino, Italian, laborer, outside, was fatally injured by jumping from a car. He was on top of a car, which he with others had dumped, and he jumped to the ground with a shovel in his hands. The shovel slipped from his hand and he struck it with his stomach. He died the next day.

November 9, Old Forge No. 1 Shaft, Frank Miller, Polish, driver boy, was fatally injured. He was running with his mule ahead of the car and in some manner fell across the rail, and was disemboweled. He died the same day.

November 29, Langcliff Colliery, Michael Moskovitz, Polish laborer, employed outside near foot of breaker plane, had his skull crushed and was instantly killed by a runaway car, caused by the breaking of a draw bar. He was warned of the approach of the car and ran to a place of safety, but the car jumped the track, leaped 40 feet through the air and caught him.

Explosion of Gas

March 23, Barnum No. 2, Martin Flynn, Irish, rockman, was fatally injured by an explosion of gas. He was employed by a contractor in driving a tunnel from 6th to 5th vein. He and a driver boy went up this plane and encountered a body of gas. The gas exploded, burning both. Flynn died from his injuries 11 days afterward at the Hospital.

Suffocation by Gas

December 4, Central Colliery, Thomas Mulrooney, American, ash man, was found dead in an ash pit, under the boilers, where it was his duty to gather and remove the ashes. The Coroner's verdict was to the effect that they found the victim was overcome by impure air.

CONDITION OF COLLIERIES AND IMPROVEMENTS

PENNSYLVANIA COAL COMPANY

Barnum Colliery.—Barnum Nos. 2 and 3 have been greatly improved. The loss of life has been reduced very materially.

Central Colliery.—A twelve inch bore-hole has been driven to the bottom of the Red Ash vein at Laws Shaft, through which water will be pumped to the surface. A triplex, vertical electrical pump, with a capacity of 1,000 gallons per minute, against a 300 foot head, has been installed for this purpose.

Openings into the top split of the Red Ash vein have been made, and the vein is now being developed.

Three seven and one-half ton cable motors have been added to the equipment at this place.

A new locomotive house 40x25 has been built, also, a new brick barn and wagon shed 100x25, replacing the one destroyed by fire in December, 1906, is now completed; the ventilation in the shaft and Clark and Marcy slope workings has been greatly improved and the mines are in good condition.

Avoca Shaft.—The tracks in the Avoca mine have been narrowed to the gauge of Laws shaft. Rock was taken down on some heading roads to accommodate the Central mine cars. All the coal in the Avoca mine will be footed at Laws shaft and prepared in Central breaker, when operations are resumed.

Old Forge Colliery.—The addition to the washery is nearly complete; jigs to prepare buck, pea and nut coal have been erected and will be in operation in two weeks.

No. 1 shaft was thoroughly repaired during the year; the old wood cribbing was taken out and replaced with concrete; the wood engine house was torn down, and replaced with a brick building; all buntons, guides and brattice work were renewed and the shaft remodeled.

Six, seven and one-half ton cable reel motors have been added to the electrical equipment, as follows: two at No. 2 shaft, two at No. 1 shaft, and two in the Clark Mountain drift. At Old Forge No. 2 shaft a new mine hospital and foreman's office has been built in the Five Foot vein.

The ventilation is being continually improved. A new air shaft to be sunk near the most advanced workings will give another outlet and an abundance of air.

The Old Forge mines are in good condition.

LEHIGH VALLEY COAL COMPANY

William A. Colliery.—The company drove a plane in the Red Ash vein, connecting the Lawrence and the William A. mines and installed an oil burning locomotive for inside transportation between Babylon and William A. All the coal from the Lawrence shaft workings and drift workings and also from the Babylon shaft workings and drift workings, is being conducted underground to the foot of William A. shaft and prepared in the William A. breaker.

The condition of the Lehigh Valley collieries in this district is such that a great deal of care is required on the part of the Inspector which is very annoying to the officials in charge.

Seneca Colliery.—The No. 9 slope in the Twin Shaft, Marcy vein, has been driven to the 5th and 6th veins, which are being developed near Scovel Island.

Rapsons tunnel has been driven through the big fault near or on the Phoenix lease, and the Marcy veins are being developed on the west side of this line of disturbance; the new air returns for the Columbia shaft workings and the Twin Marcy slope have been completed; a very modern concrete mule barn to accommodate 60 mules has been built, and also a concrete station house inside for the ambulance car. A pump house is being built at the foot of the Marcy vein slope for the installation of some heavy pumping machinery.

In the Pittston vein, the thickness of roof cover is the problem. The workings are parallel to and under the Susquehanna river, and the quantity of sand wash over the vein is a condition sufficiently serious to impress the company with the advisability of keeping the development of this vein isolated from their other workings, and advancing only when a bore-hole, sunk ahead, proves the thickness of the rock covers. These bore-holes are driven at intervals of 100 feet. Whether the rock cover will give out, or a pot hole or crevice be tapped between bore-holes, remains to be seen.

At the Twin shaft, the Clark 5th and 6th veins are being developed at Scovel Island, a substantial coal barrier being retained between the new and the old workings.

It was the 5th and 6th veins that collapsed at the time of the Twin shaft disaster, when there was a great loss of life, and the condition of these workings to-day is problematical. It is known, however, that they contain a large quantity of water, and it is the Company's intention to try to get it out with the pumps now being installed. It is also known that these old workings contain some gas, but how much is not known. A careful inspection, however, fails to show anything alarming. The action of gas and water in bore-holes, driven to caved territory in the 5th and 6th veins, prompted me to ask the Department of Mines to appoint some other inspectors to look over the ground, and report the result of their investigation to me in writing. This was done and the report filed in Harrisburg.

At the Babylon Colliery the robbing, which is about all that is being done, is progressing very well. A large percentage of coal is being won, and a fatal accident is a rare thing.

At the Lawrence the management has, in my opinion, persisted in risking life to rob the pillars, which in some instances are reduced to culm in the squeezed territory in which the men labor, contrary to my requests and instructions in the matter, the argument advanced being that the men are reasonably "safe" and the coal must be won. The territory that could now be robbed with some degree of safety is left to be destroyed by the cancerous growth of this squeeze, which must advance, as the resistance now retarding its development is reduced, by removing the crushed masses of coal that once did duty as pillars.

William A. Colliery.—This is a pillar problem, the solution of which has caused the most serious thought on the part of the officials in charge. The three splits of the Red Ash vein are mined, and the relative position of one to the other, with three pitches, (two to the basin, and one at right angles to it,) the Lawrence being above them at the highest elevation, and the only anchoring point being the pillar under the Lackawanna River, are the problems they must overcome to win the coal, preserve their property, and not sacrifice life. To my knowledge nothing definite has been decided upon.

HILLSIDE COAL AND IRON COMPANY

Consolidated Colliery.—There have been some new developments in the Red Ash vein, which will increase the tonnage and continue the life of this colliery.

CONNELL ANTHRACITE MINING COMPANY

Connells Colliery.—This company has increased their electrical equipment by the installation of motors, undercutters and dynamos. They have also constructed a large dynamo house and increased the horse power of their boiler plant.

The mines are in good condition.

ELLIOTT McCLURE AND COMPANY

Sibley Colliery.—The new breaker, boiler house and shaft have been completed, and the lower Dunmore veins are in course of development.

O'BOYLE-FOY ANTHRACITE COAL COMPANY

O'Boyle-Foys Colliery.—This colliery is developing rapidly and promises to be one of the largest producers in the basin during the life of the property. At present a tail-rope system is being installed.

I have had no call to investigate accidents at this colliery, which speaks well for the management, as the vein being mined has a very bad roof.

DELAWARE, LACKAWANNA AND WESTERN RAILROAD COMPANY

Hallstead Colliery.—Two new, very strong auxiliary dams will be built of concrete, on the rock planes, driven from the Red Ash to the Marcy vein.

RELIANCE COAL COMPANY

Reliance Colliery.—The second opening for the Clark vein in this mine has been secured after much difficulty. At present the Clark vein and shaft are filled with water, which is overflowing into the Twin shaft workings at the Marcy vein. This water comes from the Pennsylvania Pittston vein.

A new boiler plant is in course of construction.

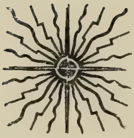
HUDSON COAL COMPANY

Spring Brook Colliery.—The operations at this mine are confined to second mining almost exclusively, which is being done with care.

Langcliff Colliery.—No. 2 slope in the Red Ash vein is now completed, having been driven a distance of 800 feet. The mines are principally a pillar proposition, and are in fair condition.

JERMYN AND COMPANY

Jermyn and Company.—The coal that was being prepared at No. 2 breaker is now conducted underground and prepared at No 1 breaker; a new washery has been erected at No. 2 on the site of the old breaker recently destroyed by fire. The estimated capacity of this washery is not less than 700 tons per day.



Sixth District

LUZERNE COUNTY

Pittston, Pa., February 29, 1908.

Hon. James E. Roderick, Chief of Department of Mines:

Sir: I have the honor of transmitting herewith my annual report as Inspector of Mines for the Sixth Anthracite District, for the year ending December 31, 1907. The report gives the statistical information as required by law, also a brief description of the fatal and non-fatal accidents that occurred during the year, with other useful information.

Respectfully submitted,
HUGH McDONALD,
Inspector.

SUMMARY OF STATISTICS

Number of collieries,	15
Number of mines,	33
Number of mines in operation,	33
Number of tons of coal shipped to market,	3,359,802
Number of tons used at mines for steam and heat,	353,982
Number of tons sold to local trade and used by employes,	34,907
Number of tons produced,	3,748,691
Number of tons produced by compressed air machines,	—
Number of tons produced by electrical machines,	—
Number of persons employed inside of mines,	6,297
Number of persons employed outside,	2,563
Number of fatal accidents inside of mines,	40
Number of fatal accidents outside,	10
Number of non-fatal accidents inside of mines,	79
Number of non-fatal accidents outside,	14
Number of tons of coal produced per fatal accident inside,	93,717
Number of persons employed per fatal accident inside,	157
Number of persons employed per fatal accident outside,	256
Number of persons employed per non-fatal accident inside,	79
Number of persons employed per non-fatal accident outside,	183
Number of wives made widows,	30
Number of children orphaned,	59
Number of steam locomotives used outside,	26
Number of compressed air locomotives used inside,	6
Number of electric motors used inside,	21
Number of fans in use,	34
Number of gaseous mines in operation,	15
Number of non-gaseous mines in operation,	18
Number of new mines opened,	1

TABLE A

PRODUCTION OF COAL

Names of Operators	Tons
Pennsylvania Coal Company,	1,942,722
Lehigh Valley Coal Company,	601,781
Hillside Coal and Iron Company,	476,592
Hudson Coal Company,	468,741
Delaware and Hudson Company,	130,494
Traders' Coal Company,	128,361
Total,	3,748,691

Production by Counties

Luzerne,	3,748,691

TABLE B.—Fatal and non-fatal accidents inside and outside of mines; number of tons of coal produced per accident; number of persons employed; number employed per accident

Names of Operators	Fatal Accidents			Non-fatal Accidents			Tons of coal produced per fatal accident inside	Tons of coal produced per non-fatal accident inside	Number of employes inside	Number of employes outside	Total number of employes	Number of employes inside per fatal accident	Number of employes outside per fatal accident	Number of employes inside per non-fatal accident	Number of employes outside per non-fatal accident
	Inside	Outside	Total	Inside	Outside	Total									
Pennsylvania Coal Co.,	24	1	25	43	6	49	80,946	45,179	3,200	1,180	4,380	133	1,180	74	197
Lehigh Valley Coal Co.,	4	4	8	7	2	9	150,445	85,969	695	414	1,109	174	103	99	207
Hillside Coal and Iron Co.,	5	5	10	11	3	14	95,318	43,327	908	446	1,354	181	89	82	148
Hudson Coal Co.,	6	....	6	12	3	15	81,457	39,061	956	352	1,308	159	....	79	117
Delaware and Hudson Co.,	....	....	....	5	....	5	....	26,099	238	95	333	....	....	48	....
Traders' Coal Co.,	1	....	1	1	....	1	128,361	128,361	300	76	376	300	....	300	....
Totals and averages for district,	40	10	50	79	14	93	93,717	47,451	6,297	2,563	8,860	157	256	79	183

TABLE C.—Classification of Fatal Accidents Inside and Outside of Mines

	Months													
	January	February	March	April	May	June	July	August	September	October	November	December	Totals	Percentages
Causes of Accidents Inside														
Falls of coal,	1	....	....	....	1	....	1	....	....	....	....	....	3	7.50
Falls of roof,	1	1	1	1	....	4	1	5	....	....	1	....	15	37.50
Mine cars,	....	....	...	....	....	....	1	1	....	....	....	....	2	5.00
Explosions of gas and dust,	1	....	....	....	1	....	2	....	1	....	....	....	5	12.50
Explosions of powder and dynamite,	....	....	....	....	....	....	....	....	....	....	....	2	2	5.00
Premature blasts,	....	....	1	....	....	....	1	....	1	....	....	....	3	7.50
Falling into shafts,	....	1	...	....	1	1	....	....	....	....	....	....	3	7.50
Miscellaneous,	....	....	1	1	....	4	....	....	....	....	....	1	7	17.50
Totals,	3	2	3	2	3	9	6	6	2	....	1	3	40	100.00
Causes of Accidents Outside														
Cars,	....	....	...	2	....	....	....	1	....	....	....	....	3	30.00
Machinery,	....	....	....	1	....	1	....	....	....	....	....	....	2	20.00
Suffocation in chutes, etc.,	....	....	1	....	....	....	....	....	....	....	....	....	1	10.00
Electricity,	....	....	....	....	....	....	....	....	....	....	2	....	2	20.00
Miscellaneous,	1	....	....	....	....	....	1	....	....	....	....	....	2	20.00
Totals,	1	....	1	3	....	1	1	1	....	....	2	....	10	100.00
Grand totals inside and outside,	4	2	4	5	3	10	7	7	2	....	3	3	50	

TABLE D.—Classification of Non-fatal Accidents Inside and Outside of Mines

	Months													
	January	February	March	April	May	June	July	August	September	October	November	December	Totals	Percentages
Causes of Accidents Inside														
Falls of coal,	1	2	....	1	1	....	....	....	....	....	1	....	6	7.60
Falls of roof,	....	....	3	....	4	2	5	1	2	2	....	1	20	25.31
Mine cars,	1	3	2	3	1	2	1	1	4	2	1	2	23	29.11
Explosions of gas and dust,	1	1	3	....	....	1	2	....	2	....	5	....	15	18.99
Explosions of powder and dynamite,	....	....	....	....	....	....	1	....	....	....	....	....	1	1.27
Premature blasts,	1	....	1	1	....	3	....	....	....	....	1	2	9	11.39
Mules,	...	1	....	....	....	....	....	....	....	....	....	....	1	1.27
Machinery,	....	....	....	....	....	....	....	2	....	....	....	....	2	2.53
Miscellaneous,	2	....	....	....	....	....	....	....	....	....	....	....	2	2.53
Totals,	6	7	9	5	6	8	9	4	8	4	8	5	79	100.00
Causes of Accidents Outside														
Cars,	1	....	....	....	1	....	1	....	....	1	1	....	5	35.72
Machinery,	....	....	....	....	....	....	....	....	....	....	1	....	1	7.14
Miscellaneous,	....	....	2	1	....	....	2	....	....	1	2	....	8	57.14
Totals,	1	....	2	1	1	....	3	....	....	2	4	....	14	100.00
Grand totals inside and outside,	7	7	11	6	7	8	12	4	8	6	12	5	93	

TABLE E.—Occupations of Persons Killed or Fatally Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Inside													
Mine foremen,	....	....	1	....	....	....	....	....	....	....	....	....	1
Miners,	3	1	2	1	3	1	5	3	2	....	....	1	22
Miners' laborers,	....	....	....	....	....	1	....	1	....	....	1	1	4
Drivers and runners,	....	....	....	1	....	1	....	....	....	....	....	1	3
Company men,	....	1	....	....	....	6	1	2	....	....	....	....	10
Totals,	3	2	3	2	3	9	6	6	2	....	1	3	40
Outside													
Superintendents,	....	....	....	....	....	....	....	....	....	....	1	....	1
Slatepickers (boys),	....	....	....	....	....	....	1	1	....	....	....	....	2
All other employes,	1	....	1	3	....	1	....	....	....	....	1	....	7
Totals,	1	....	1	3	....	1	1	1	....	....	2	....	10
Grand totals inside and outside,	4	2	4	5	3	10	7	7	2	....	3	3	50

TABLE F.—Occupations of Persons Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Inside													
Mine foremen,	....	....	....	....	1	....	....	....	....	....	....	....	1
Miners,	4	3	5	2	2	3	7	1	2	2	6	3	40
Miners' laborers,	2	....	2	1	1	1	1	....	2	1	1	....	12
Drivers and runners,	....	1	1	2	....	2	1	....	1	....	....	2	10
Doorboys and helpers,	....	....	....	....	....	....	....	....	1	....	1	....	2
Company men,	....	3	....	....	2	2	....	1	1	....	....	....	9
All other employes,	....	....	1	....	....	....	....	2	1	1	....	....	5
Totals,	6	7	9	5	6	8	9	4	8	4	8	5	79
Outside													
Blacksmiths and carpenters,	....	....	....	....	....	....	....	....	....	....	1	....	1
Slatepickers (boys),	....	....	....	....	....	....	1	....	....	....	1	....	2
All other employes,	1	....	2	1	1	....	2	....	....	2	2	....	11
Totals,	1	....	2	1	1	....	3	....	....	2	4	....	14
Grand totals inside and outside,	7	7	11	6	7	8	12	4	8	6	12	5	93

TABLE G.—Nationality of Persons Killed or Fatally Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
American,	....	....	1	2	....	4	1	1	....	....	....	2	11
English,	....	....	1	....	....	1	....	....	....	....	....	....	2
Welsh,	....	....	....	....	....	....	....	....	....	....	1	....	1
Irish,	....	....	....	1	1	2	1	2	....	....	....	....	7
German,	....	....	....	....	....	....	....	2	....	....	....	....	2
Polish,	3	1	....	1	1	1	3	1	1	....	1	....	13
Italian,	....	1	2	....	1	2	....	1	1	....	1	1	10
Slavonian,	1	....	....	....	....	....	1	....	....	....	....	....	2
Austrian,	....	....	....	....	....	....	1	....	....	....	....	....	1
Russian,	....	....	....	1	....	....	....	....	....	....	...	....	1
Totals,	4	2	4	5	3	10	7	7	2	....	3	3	50

TABLE H.—Nationality of Persons Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
American,	2	....	2	3	1	3	3	3	2	1	5	2	27
English,	....	....	....	....	....	....	....	....	1	....	....	....	1
Welsh,	....	....	2	....	....	....	....	....	....	....	....	....	2
Scotch,	....	....	....	....	1	....	....	....	....	....	....	....	1
Irish,	....	1	....	....	....	1	....	....	1	1	1	....	5
German,	....	....	....	....	1	....	....	....	....	....	....	....	1
Polish,	2	3	1	1	1	1	1	1	3	1	4	2	21
Hungarian,	....	....	....	....	....	....	1	....	....	....	....	....	1
Italian,	1	....	4	2	2	2	4	....	....	1	1	....	17
Slavonian,	....	....	2	....	....	....	....	....	....	1	....	1	4
Lithuanian,	1	2	....	....	....	...	2	....	1	1	1	....	8
Austrian,	....	1	....	....	1	....	1	....	....	....	....	....	3
Russian,	1	....	....	....	....	1	....	....	....	....	....	....	2
Totals,	7	7	11	6	7	8	12	4	8	6	12	5	93

TABLE I.—Operators and mines, kind of openings, type and size of fans, size of furnaces, volume of air produced by fan or furnace per minute, number of splits of air currents, number of persons employed inside

Names of Operators and Mines	Kind of opening	Gaseous or non-gaseous	Method of ventilation	Diameter of fan in feet	Width of blades in feet	Depth of blades in feet	Number of revolutions per minute	Water gauge developed—in inches	Name of fan	Power used	Area of furnace bars in square feet	Number of splits of air currents	Number of cubic feet of air per minute entering the mine at inlet	Total quantity of air per minute circulating in all the splits in cubic feet	Number of persons employed inside
Pennsylvania Coal Co.															
Number 6 Colliery:															
Number 5,	Shaft,	Gaseous,	Fan,	20	6.6	5.3	58	1.00	Guibal, ...	Steam...	....	7	96,300	68,800	285
Number 6,	Shaft,	Gaseous,	Fan,	20	6.6	5.3	60	1.00			....	8	90,826	77,870	240
Number 11,	Shaft,	Gaseous,	Fan,	20	6	5.0	62	1.20			....	9	80,600	59,900	215
Numbers 8 and 9 Collieries:															
Number 1,	Shaft,	Gaseous,	Fan,	20	6.6	5.3	50	.90			....	4	90,210	75,105	210
Number 8,	Shaft,	Gaseous,	Fan,	20	6.6	5.3	50	.80			....	3	86,225	74,890	175
Number 9,	Shaft,	Gaseous,	Fan,	20	6	5.0	64	1.10			....	6	87,800	65,515	248
Number 10,	Shaft,	Gaseous,	Fan,	20	6	5.0	63	2.0			....	4	84,800	70,100	210
Ewen Colliery:															
Number 4,	Shaft,	Gaseous,	Fan,	20	6.6	5.3	63	1.50			....	6	89,870	80,705	216
Number 7,	Shaft,	Gaseous,	Fan,	20	6.6	5.3	60	1.10			....	5	86,280	71,333	280
Hoyte,	Shaft,	Gaseous,	Fan,	20	6	5.0	78	1.20			....	9	145,100	130,700	282
Number 14 Colliery:															
Number 14,	Shaft,	Gaseous,	2 fans,	20	6	5.0	70	1.80			....	10	196,100	158,730	461
Number 14,	Tunnel,	Gaseous,	Fan,	17	5	4.0	64	.80			....	4	58,390	50,990	173
Courtright,	Slope,	Non-gas.	Fan,	20	6	5	40	.50			....	1	21,750	15,170	26
Lehigh Valley Coal Co.															
Mineral Spring Colliery:															
Mineral Spring,	Shaft,	Non-gas.	Fan,	20	6	5	60	.5	Guibal, ...	Steam,..	....	2	65,575	58,150	215
Mineral Spring,	Slope,	Non-gas.	Fan,	12	4.2	3.5	100	.5			....	2	28,300	25,200	61
Coal Brook,	Slope,	Non-gas.	Fan,	20	6	5.5	45	.3			....	2	33,100	28,100	75
Coal Brook,	Tunnel,	Non-gas.	......	......	......	......	......	......	......	......	...	1	24,200	20,000	51

Heidelburg Colliery No. 1:															
Heidelburg No. 1,	Slope,	Non-gas.	Fan,	16.5	4	4	76	.6	Guibal,	Steam,	....	2	57,645	50,380	83
Heidelburg No. 2,	Slope,	Non-gas.	Fan,	10	4	2.6	124	.8			....	2	67,620	45,385	78
Heidelburg,	Shaft,	Non-gas.	Fan,	20	5.8	5	65	.4			....	3	57,835	50,275	117
Hillside Coal and Iron Co.															
Butler Colliery:															
Thomas,	Shaft,	Non-gas.	2 fans,	15 16	3.6 4.3	4.4 4	85 85	.4 .5	Guibal, Guibal,	Steam, Electricity	..	5	65,390	60,400	229
Butler Marcy,	Slope,	Non-gas.	Fan,	20	6	6	80	2	Guibal,	Steam,	....	3	70,800	44,500	95
Butler Checker,	Slope,	Non-gas.	Fan,	12	4	4	90	1.2	Guibal,	Steam,	....	3	44,300	37,500	90
Fernwood Colliery:															
Fernwood No. 1,	Slope,	Non-gas.	Fan,	13.6	4	3.10	95	1	Guibal,	Steam,	....	4	63,000	58,100	100
Fernwood No. 5,	Slope,	Non-gas.	Fan,	13	3	3	95	1.3	Guibal,	Steam,	....	3	22,000	20,000	64
Clarence Colliery:															
Clarence No. 1,	Slope,	Non-gas.	Fan,	16	4	3.3	95	1	Guibal,	Steam,	....	2	26,140	18,120	88
Clarence No. 2,	Slope,	Non-gas.	....	......	......	......	.....	......	....	....	....	1	13,060	9,200	57
Hudson Coal Co.															
Laflin Colliery:															
Laflin,	Shaft,	Non-gas.	Fan,	20	5	5	75	.5	Guibal,	Steam,	....	5	182,585	156,915	193
Laflin,	Tunnel,	Non-gas.	Fan,	14	4	3.6	85	.8			....	2	65,871	54,130	85
Pine Ridge Colliery:															
Pine Ridge,	Shaft,	Gaseous,	Fan,	28	8	7.75	60	1.5			....	10	258,800	117,000	379
Laurel Run,	Slope,	Gaseous,	Fan,	28	8	7.75	56	1.3			....	8	187,310	87,850	250
Delaware and Hudson Co.															
Delaware,	Shaft,	Gaseous,	2 fans,	22.5 22.5	6.6 6.6	5.6 5.6	80 60	2.2 1.6	Guibal,	Steam,	....	8	125,860	91,135	226
Traders' Coal Co.															
Ridgewood,	Slope,	Non-gas.	Fan,	16	5.2	4	85	.9	Guibal,	Steam,	....	8	89,635	83.930	260

TABLE 1.—Operators, location of collieries, railroads, etc.

Names of Operators and Collieries	County	Name of General Superintendent	Post Office	Name of Superintendent	Post Office	Railroad to Mine
Pennsylvania Coal Co.						
Number 6,	Luzerne,	William A. May, Gen. Manager.	Dunmore,	H. T. McMillian,	Pittston,	Erie
Number 8,		W. W. Inglis,		W. P. Jennings,	Pittston,	
Number 9,		W. W. Inglis,		W. P. Jennings,	Pittston,	
Ewen,		W. W. Inglis,		H. T. McMillian,	Pittston,	
Number 14,		W. W. Inglis,		John W. Reid,	Plainsville,	
Number 6 Washery,		W. W. Inglis,		H. T. McMillian,	Pittston,	
Ewen Washery,		W. W. Inglis,		H. T. McMillian,	Pittston,	
Lehigh Valley Coal Co.						
Mineral Spring,	Luzerne,	S. D. Warriner,	Wilkes-Barre,	Thomas Thomas,	Wilkes-Barre,	Lehigh Valley
Heidelburg Nos. 1 and 2,				D. W. Owens,	Pittston,	
Hillside Coal and Iron Co.						
Butler,		William A. May, Gen. Manager,	Dunmore,	E. D. Caryl,	Pittston,	Erie
Fernwood,	Luzerne,	V. L. Peterson,	Scranton,	J. H. Williams,		N. Y. S. and W.
Clarence,		V. L. Peterson,	Scranton,	J. H. Williams,		C. R. R. of N. J.
Susquehanna Washery,		V. L. Peterson,	Scranton,	J. H. Williams,		N. Y. S. and W.
Yatesville Washery,		V. L. Peterson,	Scranton,	J. H. Williams,		C. R. R. of N. J.
Hudson Coal Co.						
Laflin,	Luzerne,	C. C. Rose,	Scranton,	E. R. Pettebone,	Dorranceton,	Delaware and Hudson
Pine Ridge,						
Delaware and Hudson Co.						
Delaware,	Luzerne,	C. C. Rose,	Scranton,	E. R. Pettebone,	Dorranceton,	Delaware and Hudson
Traders' Coal Co.						
Ridgewood,	Luzerne,	W. L. Schlager, Manager,	Scranton,	Theo. Hogan,	Pittston,	N. Y. S. and W.

TABLE 2.—Number of tons of coal mined, number of days worked, number of persons employed, number killed and injured, quantity of powder and dynamite used, etc.

Names of Operators and Collieries	County	Number of tons of coal shipped to market	Number of tons used at collieries for steam and heat	Number of tons sold to local trade and used by employes	Total production of coal in tons	Number of days worked	Number of employes	Number of fatal accidents	Number of non-fatal accidents	Number of kegs of powder used	Number of pounds of dynamite used	Number of horses and mules
Pennsylvania Coal Co.												
Number 6,	Luzerne,	349,352	19,034	7,229	375,615	234	973	3	13	18,488	35,842	116
Number 8,		99,183	10,217	....	109,400	129	509	5	1	3,531	966	93
Number 9,		161,686	29,994	1,282	192,962	65	757	2	4	5,570	1,644	93
Ewen,		464,544	32,285	....	496,829	228	910	2	12	16,411	17,971	89
Number 14,		510,795	25,446	1,689	537,930	194	1,103	12	19	19,566	27,085	126
		1,585,560	116,976	10,200	1,712,736	....	4,252	24	49	63,566	83,508	517
Washeries												
Number 6,	Luzerne,	170,935	9,828	....	180,763	....	105	1	......	....	....	......
Ewen,		46,023	3,200	....	49,223	....	23	......	......	....	....	......
		216,958	13,028	....	229,986	....	128	1	......	....	....	......
Totals,	....	1,802,518	130,004	10,200	1,942,722	....	4,380	25	49	63,566	83,508	517
Lehigh Valley Coal Co.												
Mineral Spring,	Luzerne,	240,240	37,750	3,100	281,090	229	505	4	7	7,772	72,160	83
Heidelburg No. 1,		207,194	17,897	1,141	226,232	244	365	3	1	6.048	24,201	61
Heidelburg No. 2,		76,930	16,235	1,294	94,459	146	239	1	1	3.205	15,159	45
Totals,	....	524,364	71,882	5,535	601,781	....	1,109	8	9	17.025	111,520	189

TABLE 2.—Continued.

Names of Operators and Collieries	County	Number of tons of coal shipped to market	Number of tons used at collieries for steam and heat	Number of tons sold to local trade and used by employes	Total production of coal in tons	Number of days worked	Number of employes	Number of fatal accidents	Number of non-fatal accidents	Number of kegs of powder used	Number of pounds of dynamite used	Number of horses and mules
Hillside Coal and Iron Co.												
Butler, ...	Luzerne,.......	252,371	14,102	7,258	273,731	228	674	4	9	13,442	39,597	61
Fernwood, ...		80,373	20,627	241	101,241	185	399	5	3	4,918	32,971	45
Clarence, ...		28,487	5,988	155	34,630	158	215	......	1	2,788	7,549	26
		361,231	40,717	7,654	409,602	....	1,288	9	13	21,148	80,117	132
Washeries												
Susquehanna, ...	Luzerne,.......	36,013	4,207	....	40,220	....	42	......	1	....	....	2
Yatesville, ...		23,186	3,584	....	26,770	....	24	1	......	....	....	2
		59,199	7,791	....	66,990	....	66	1	1	....	....	4
Totals, ...	....	420,430	48,508	7,654	476,592	....	1,354	10	14	21,148	80,117	136
Hudson Coal Co.												
Laflin, ...	Luzerne,.......	119,286	16,796	740	136,822	178	484	2	7	10,081	46,252	68
Pine Ridge, ...		273,220	54,630	4,069	331,919	242	824	4	8	16,311	11,567	96
Totals, ...	....	392,506	71,426	4,809	468,741	....	1,308	6	15	26,392	57,819	164
Delaware and Hudson Co.												
Delaware, ...	Luzerne,.........	102,405	24,897	3,192	130,494	155	333	......	5	6,563	1,220	45
Traders' Coal Co.												
Ridgewood, ...	Luzerne,.........	117,579	7,265	3,517	128,361	280	376	1	1	9,461	12,860	41
Grand totals, ...	....	3,359,802	353,982	34,907	3,748,691	....	8,860	50	93	144,155	347,044	1,092

TABLE 2.—Part 2

Names of Operators	County	Number of Boilers					Locomotives			Number of steam engines of all classes	Total horse power	Number of pumps delivering water to surface	Capacity in gallons per minute	Quantity delivered to surface per minute—gallons	Number of electric dynamos	Number of air compressors
		Cylindrical	Horse power	Tubular	Horse power	Total horse power	Steam	Air	Electric							
Pennsylvania Coal Co.,	Luzerne,	6	132	75	12,898	13,030	15	6	7	158	8,241	15	19,563	10,003	3	13
Lehigh Valley Coal Co.,		......	....	20	3,250	3,250	3	......	......	54	3,722	12	7,812	6,352	......	......
Hillside Coal and Iron Co.,		......	....	25	3,450	3,450	7	......	14	48	3,740	6	2,396	1,348	4	......
Hudson Coal Co.,		......	....	20	3,940	3,940	1	......	......	99	4,876	6	7,500	3,600	......	4
Delaware and Hudson Co.,		15	405	6	850	1,255	......	......	......	47	2,076	3	5,200	1,900	......	2
Traders' Coal Co.,		8	160	1	125	285	......	......	......	10	250	2	600	400	......	......
Totals,		29	697	147	24,513	25,210	26	6	21	416	22,905	44	43,071	23,603	7	19

Table 3.—Number of each class of employes inside and outside of mines

Names of Operators and Collieries	County	Inside											Outside										
		Mine foremen	Assistant mine foremen	Fire bosses and assistants	Miners	Miners' laborers	Drivers and runners	Doorboys and helpers	Pumpmen	Company men	All other employes	Total inside	Superintendents	Foremen	Blacksmiths and carpenters	Engineers and firemen	Slate pickers (boys)	Slate pickers (men)	Bookkeepers and clerks	All other employes	Total outside	Grand total inside and outside
Pennsylvania Coal Co.																						
Number 6,	Luzerne,	4	10	....	270	254	116	15	3	81	.....	753	......	1	18	17	50	23	2	109	220	973
Number 8,		2	1	....	122	132	52	11	......	16	26	362	......	1	6	9	55	28	2	46	147	509
Number 9,		4	2	1	185	186	48	8	5	24	19	482	......	1	37	34	45	36	3	119	275	757
Ewen,		3	3	4	216	242	101	15	4	58	78	724	......	1	18	26	47	16	4	74	186	910
Number 14,		4	3	4	277	268	146	14	8	52	103	879	......	2	20	26	18	35	2	121	224	1,103
		17	19	9	1,070	1,082	463	63	20	231	226	3,200	......	6	99	112	215	138	13	469	1,052	4,252
Washeries																						
Number 6,	Luzerne,	....	....	....	.....	......	......	......	......	......	.....	......	......	1	2	6	......	......	1	95	105	105
Ewen,		....	....	....	.....	......	......	......	......	......	.....	......	......	1	1	1	......	......	......	20	23	23
		....	....	....	......	......	......	......	......	......	.....	......	......	2	3	7	......	......	1	115	128	128
Totals,		17	19	9	1,070	1,082	463	63	20	231	226	3,200	......	8	102	119	215	138	14	584	1,180	4,380
Lehigh Valley Coal Co.																						
Mineral Spring,	Luzerne,	2	3	1	140	60	69	9	8	......	48	340	......	1	13	22	9	......	3	117	165	505
Heidelburg No. 1,		1	....	1	111	37	38	2	3	35	.....	228	......	1	9	15	30	10	3	69	137	365
Heidelburg No. 2,		1	....	1	46	24	24	2	4	25	.....	127	......	1	7	19	27	8	3	47	112	239
Totals,		4	3	3	297	121	131	13	15	60	48	695	......	3	29	56	66	18	9	233	414	1,109

Hillside Coal and Iron Co.																						
Butler,	Luzerne,	2	....	1	178	132	37	5	6	7	108	476	1	1	9	17	70	......	4	96	198	674
Fernwood,		1	1	....	121	92	28	5	4	......	37	289	1	1	13	10	24	10	2	49	110	399
Clarence,		1	....	...	55	42	18	4	3	......	20	143	......	1	5	5	16	6	1	38	72	215
		4	1	1	354	266	83	14	13	7	165	908	2	3	27	32	110	16	7	183	380	1,288
Washeries																						
Susquehanna,	Luzerne,	....	....	....	......	......	......	......	......	......	......	......	......	1	......	6	......	......	.....	35	42	42
Yatesville,		....	....	....	......	......	......	......	......	......	......	......	......	1	1	3	......	......	.....	19	24	24
		....	....	....	......	......	......	......	......	......	......	......	......	2	1	9	......	......	......	54	66	66
Totals,		4	1	1	354	266	83	14	13	7	165	908	2	5	28	41	110	16	7	237	446	1,354
Hudson Coal Co.																						
Laflin,	Luzerne,	1	1	3	177	115	52	6	2	23	5	385	......	1	7	13	12	13	2	51	99	484
Pine Ridge,		2	2	6	200	169	77	7	5	87	16	571	......	1	9	30	46	78	3	86	253	824
Totals,		3	3	9	377	284	129	13	7	110	21	956	......	2	16	43	58	91	5	137	352	1,308
Delaware and Hudson Co.																						
Delaware,	Luzerne,	1	1	3	60	92	34	11	3	31	2	238	......	1	5	18	21	8	2	40	95	333
Traders' Coal Co.																						
Ridgewood,	Luzerne,	2	1	1	140	65	45	12	1	25	8	300	1	1	7	10	12	20	3	22	76	376
Grand totals,		31	28	26	2,298	1,910	885	126	59	464	470	6,297	3	20	187	287	482	291	40	1,253	2,563	8,860

TABLE 3.—Part 2

Names of Operators and Collieries	County	Number of Days Worked in Breaker												
		January	February	March	April	May	June	July	August	September	October	November	December	Total
Pennsylvania Coal Co.														
Number 6,	Luzerne,	20	16	21	20	21	21	21	18	18	19	18	21	234
Number 8,		20	17	23	22	23	24	....	....	....	....	....	....	129
Number 9,		....	....	....	....	....	....	....	13	12	15	13	12	65
Ewen,		20	15	19	20	19	22	20	18	16	19	20	20	228
Number 14		17	14	18	18	18	18	17	14	12	15	16	17	194
Lehigh Valley Coal Co.														
Mineral Spring,	Luzerne,	23	18	16	17	18	21	20	18	19	19	19	21	229
Heidelburg No. 1,		19	17	21	23	21	24	21	20	14	20	22	22	244
Heidelburg No. 2,		17	15	15	15	17	19	17	16	15	....	....	....	146
Hillside Coal and Iron Co.														
Butler,	Luzerne,	19	17	20	19	19	20	16	17	16	23	20	22	228
Fernwood,		17	13	19	21	22	20	22	21	18	12	....	....	185
Clarence,		12	....	....	18	19	18	9	16	14	17	17	18	158
Hudson Coal Co.														
Laflin,	Luzerne,	17	18	15	15	14	14	14	13	13	15	15	15	178
Pine Ridge,		21	18	21	19	20	19	21	19	20	23	22	19	242
Delaware and Hudson Co.														
Delaware,	Luzerne,	14	14	13	12	12	12	13	12	12	14	14	13	155
Traders' Coal Co.														
Ridgewood,	Luzerne,	26	22	24	25	24	21	22	26	23	23	22	22	280

TABLE 4.—Fatal accidents inside and outside of mines

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Number of widows	Number of orphans	Name of Mine	County	Nature and Cause of Accident in Brief
Jan.	4	George Progis, ...	Polish,........	Miner, ...	25	S.	....	..	No. 8 Shaft, ...	Luzerne,.......	Fatally injured by fall of top coal he was barring down. Died the same day.
	11	George Yalaska, ...	Polish,.......	Miner, ...	28	M.	1	1	Thomas Shaft, ..		Fatally injured by a fall of rock. Died the same day.
	17	Augustine Vincent, ..	Polish,.......	Miner, ...	32	M.	1	1	Pine Ridge, ...		Fatally burned by gas at face of breast. Died the same day.
	18	Peter Kashew, ...	Slavonian,...	Driver, ...	17	S.	....	...	Heidelburg No. 1 Breaker,		Fatally injured, kicked by his mule. Died January 26. Outside.
Feb.	23	Joseph Ciracno, ...	Italian,......	Co. laborer,	21	S.	....	...	Thomas Shaft, ..		Killed by falling down shaft from Marcy to Red Ash vein.
	27	Joseph Melitz, ...	Polish,.......	Miner, ...	25	M.	1	....	Pine Ridge Shaft,		Killed by a fall of rock at face of breast.
March	11	Charles Alex, ...	Italian,......	Co. laborer,	30	M.	1	2	No. 6 Washery,..		Smothered in culm bank by a rush of culm. Outside.
	12	John Saltuthe, ...	Italian,......	Miner, ...	40	S.	....	....	Fernwood Slope,		Killed by premature blast he was tamping.
	12	Jas. Heslin, ...	American, .	Mine foreman,	39	M.	1	2	Hoyte Shaft, ...		Fatally cut on his hand. Died March 24.
	29	John Cunningham, ..	English,.....	Miner, ...	36	M.	1	6	No. 14 Tunnel, ..		Killed by fall of rock at face of breast.
April	9	Andrew Coley, ...	Polish,.......	Doorboy, ...	16	S.	....	....	Coal Brook, ...		Fatally injured by being run over by mine cars. Died the same day. Outside.
	9	John Moffatt, ...	American,...	Breaker oiler,	18	S.	....	....	Fernwood Breaker,		Fatally injured. Caught on shaft. Died the same day.
	9	Charles Senivich, ...	Russian,.....	Car loader,	20	S.	....	....	Yatesville Washery,		Fatally injured. Struck by railroad car.
	24	John Kelley, ...	Irish,.........	Miner, ...	58	M.	....	....	No. 14 Shaft, ...		Fatally injured by fall of rock.
	28	Peter Hines, ...	American,...	Driver, ...	17	S.	....	....	No. 1 Shaft, ...		Killed by descending cage in shaft.
May	13	John Kiggins, ...	Irish,.........	Miner, ...	51	M.	1	1	No. 1 Shaft, ...		Killed by fall of top coal and bone from pillar.
	15	Giamino Vinano, ...	Italian,......	Miner, ...	22	M.	1	2	No. 4 Shaft, ...		Fatally burned by gas. Died May 18.
	28	Joseph Jermika, ...	Polish,.......	Miner, ...	27	S.	....	....	Pine Ridge Shaft,		Killed by falling from cage down the shaft.
June	1	Angles Shara, ...	Italian,......	Laborer, ...	33	M.	1	4	Ridgewood Slope,		Killed by fall of rock at face of breast.

TABLE 4.—Continued

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Number of widows	Number of orphans	Name of Mine	County	Nature and Cause of Accident in Brief
June	4	Richard McCauley, ..	Irish, ...	Motor engineer,	26	M.	1	3	No. 14 Shaft, ...	Luzerne, ...	These three men were killed by the explosion of an air locomotive, while it was being charged with air.
	4	John Munley, ...	American, ...	Driver boss,	23	S.	....	..			
	4	Henry Waters, ...	Irish, ...	Trackman,	55	M.	1	..			
	6	Michael Durkin, ...	American, ...	Driver, ...	19	S.	....	....	Coal Brook Slope,		Killed by fall of rock on gangway road.
	19	Joseph Kellar, ...	Polish, ...	Miner, ...	29	M.	1	....	No. 6 Shaft, ...		Killed by fall of middle rock at face of breast.
	25	Stephen Thompson, . ..	English, ...	Timberman,	43	M.	1	3	Mineral Spring,		Killed by fall of rock while timbering gangway.
	28	John Gannon, ...	American, ...	Trackman, .	46	S.	....	....	No. 10 Shaft, ...		Fatally injured by falling down shaft. Died the next day.
	28	James Flaherty, ...	American, ...	Breaker sweeper,	18	S.	....	....	Heidelburg No. 1 Breaker,		Fatally injured. Caught by machinery of engine. Died the next day.
	28	Davido Fiski, ...	Italian, ...	Shaft footman,	25	S.	....	....	No. 6 Shaft, ...		Killed by being caught against roof by cage. The footman unknowingly touched the button of bell to engineer.
July	6	Andrew Selepak, ...	Slavonian, ...	Miner, ...	47	M.	1	6	Pine Ridge Shaft,		Killed by fall of top coal.
	20	Dominick Millewski, ..	Polish, ...	Miner, ...	25	S.	....	..	No. 14 Shaft, ...		Fatally burned by gas. They went into an old abandoned breast. Died the next day.
	20	Frank Petrashepskie,	Polish, ...	Miner, ...	34	M.	1	4			
	22	Wm. Langan, ...	Irish, ...	Slatepicker, ,	14	S.	....	....	Fernwood Breaker,		Fatally injured. Fell from an old head beam in breaker. Died the same evening.
	26	John Kelsey, ...	Polish, ...	Trackman, .	35	M.	1	2	Butler Slope, ...		Killed by an empty trip of cars on slope.
	29	Michael Hopkins, ...	American, ...	Miner, ...	55	M.	1	....	No. 1 Shaft, ...		Fatally injured by a premature blast. Died July 30.
	31	John Uraska, ...	Austrian, ...	Miner, ...	32	M.	1	3	Heidelburg No. 1 Slope,		Killed by fall of rock in the adjoining breast.
Aug.	2	Paul Pramuk, ...	American, ...	Slatepicker,	15	S.	....	....	Heidelburg No. 2,		Killed by a railroad car. He crawled under the car. Outside.
	3	Frank Machulins, ...	Italian, ...	Laborer, ...	40	M.	1	3	Courtright Slope,		Killed by fall of roof rock.
	14	Michael Steniski, ...	Polish, ...	Co. laborer,	43	M.	1	4	No. 6 Shaft, ...		Fatally injured by cars while riding between them. Died the same evening.

Oct.	22	Peter Flynn,	Irish,	Co. laborer,	32	M.	1	....	No. 14 Tunnel,	Luzerne,	Killed by fall of rock while timbering the gangway.
	22	Joseph Griglar,	German,	Co. miner,	50	M.	1	....			
	22	James O'Boyle,	Irish,	Co. miner,	35	M.	1	4			
	22	James Koneig,	German,	Co. miner,	54	M.	1	....			
Sept.	16	Andrew Konetiskie,	Polish,	Miner,	32	M.	1	2	No. 10 Shaft,		Killed by blast. He cut his match too short.
	28	Quantello Magasoli,	Italian,	Miner,	19	S.	....	....	Mineral Spring Shaft,		Fatally burned by gas he ignited in abandoned breast.
Nov.	2	John H. Williams,	Welsh,	General foreman,	28	M.	1	1	Fernwood,		Killed by taking hold of a live electric wire. Outside.
	2	Carman Mankelin,	Italian,	Miner,	27	M.	1	1	Fernwood,		Killed by electric shock. He took hold of Mr. Williams to pull him away. Outside.
	20	Anthony Kopec,	Polish,	Laborer,	35	M.	1	3	Thomas Shaft,		Killed by fall of rock at face of breast.
Dec.	3	Thomas Leonard,	American,	Driver,	18	S.	....	....	No. 8 Shaft,		Killed while coming up shaft in bucket by billy falling on him.
	14	Edward S. Walton,	American,	Miner,	33	M.	1	1	Laflin Tunnel,		Killed by the ignition of their powder in the box while getting oil.
	14	Joseph Corliss,	Italian,	Laborer,	34	S.	....	....			

TABLE 5.—Non-fatal accidents inside and outside of mines

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Name of Mine	County	Nature and Cause of Accident in Brief
Jan.	1	Thomas McGuinnis,	American,	Car runner,	22	S.	No. 6 Breaker,	Luzerne,	Leg broken by car coupling. Caught in frog on road. Outside.
	9	Joseph Glowka,	Polish,	Miner,	31	M.	Delaware Shaft,		Leg cut and eyes injured by blast he was firing.
	10	Stanley Quashnic,	Polish,	Laborer,	26	M.	Delaware Shaft,		Head cut and back bruised. Fell off cage in shaft.
	12	John Porrikter,	Russian,	Miner,	30	M.	Delaware Shaft,		Face and hands burned by gas at face of breast.
	25	Ronaldino Dominico,	Italian,	Miner,	30	S.	Fernwood Slope,		Leg broken; struck by hoisting rope on slope.
	30	Carl Vecher,	Lithuanian,	Laborer,	26	S.	Laflin Shaft,		Leg broken by car, while walking on plane.
	30	Wilbert McMullian,	American,	Miner,	28	M.	Coal Brook Slope,		Leg broken by a piece of top coal falling on him.
Feb.	6	George Copeach,	Austrian,	Trackman,	21	S.	Heidelburg Slope,		Both legs broken and head cut. Struck by car on slope.
	9	Joseph Jachock,	Polish,	Headman,	24	S.	Pine Ridge Shaft,		Leg badly cut by empty car on slope becoming uncoupled.
	15	James Mitchell,	Lithuanian,	Miner,	25	S.	No. 4 Shaft,		Face and hands burned by gas.
	19	Con Wiczok,	Polish,	Driver,	16	S.	Laflin Shaft,		Leg broken by car getting off track.
	20	Michael Vecher,	Lithuanian,	Miner,	31	S.	Laflin Shaft,		Back and hips bruised by fall of coal.
	20	Joseph Jezeaski,	Polish,	Miner,	43	M.	No. 14 Shaft,		Leg broken and head cut by fall of coal while barring it down.
	20	Thomas Nolan,	Irish,	Assistant driver boss,	25	S.	No. 11 Shaft,		Nose broken; kicked by a mule.
March	5	Anthony Budzinskie,	Polish,	Miner,	30	M.	Pine Ridge Shaft,		Skull fractured by fall of fire clay roof at face of breast.
	13	Lewis Bouchie,	Italian,	Laborer,	33	M.	No. 14 Tunnel,		Face and hands burned by gas at face of his breast.
	16	Charles Maughan,	American,	Miner,	28	S.	No. 14 Tunnel,		Jaw broken and head cut by fall of rock in breast.
	19	James Reddington,	American,	Driver,	16	S.	No. 4 Shaft,		Wrist broken while coupling cars while in motion.
	20	Thomas Jenkins,	Welsh,	Sweeper,	76	M.	Mineral Spring Breaker,		Eye cut while picking slate from coal in breaker. Outside.

March	21	Anthony Rosnock,	Slavonian,	Laborer,	35	M.	No. 14 Shaft,	Luzerne,	Head and shoulder cut by fall of rock at face.
	23	Raffo Offer,	Italian,	Rockman,	20	S.	Butler Slope,		Jaw broken. Struck by trip of empty cars on slope.
	26	Charles Tooher,	Slavonian,	Laborer,	40	S.	No. 6 (Outside),		Jaw broken. Struck by lever while helping to put car on track. Outside.
	29	Henry Williams,	Welsh,	Miner,	30	S.	Laurel Run Slope,		Leg broken. Struck by flying coal from a blast.
	30	Toney Karra,	Italian,	Miner,	36	M.	No. 4 Shaft,		Faces and hands were burned by gas. They were told by the fire boss not to go into the breast.
	30	Paul Arona,	Italian,	Miner,	35	M.			
April	8	Bernard Burke,	American,	Driver,	18	S.	Laurel Run Slope,		Ribs broken by car while sitting on car bumper.
	10	Salavator Valentz,	Italian,	Miner,	38	M.	Butler Marcy Slope,		Arm broken by piece of top coal falling on it.
	11	Michael Burke,	American,	Car runner,	27	S.	No. 14 Breaker,		Arm broken. Struck by prop timber while unloading it. Outside.
	18	John Shedlock,	Polish,	Laborer,	25	S.	Laurel Run Slope,		Breast bruised by car while standing on slope.
	19	Thomas Clark,	American,	Car runner,	37	M.	No. 6 Shaft,		Leg broken. While spragging car it jumped the track.
	20	Toney Ortolane,	Italian,	Miner,	26	M.	No. 11 Shaft,		Cut and bruised by premature blast he was firing.
May	6	Lorenze Picini,	Italian,	Laborer,	27	S.	No. 14 Shaft,		Two ribs broken while coupling cars while in motion.
	9	Patrick Noone,	American,	Miner,	40	S.	Hoyte,		Arm broken while barring down coal.
	14	Samuel Anderson,	Scotch,	Mine foreman,	55	M.	No. 9 Shaft,		Shoulder broken by fall of rock in pump room.
	14	Albert Mihalka,	Austrian,	Miner,	26	S.	Thomas,		Leg broken by fall of fire clay roof.
	20	Frank James,	Polish,	Machinist,	20	S.	Susquehanna Washery,		Ribs broken. Struck by freight train at washery. Outside.
	23	Sala Rose,	Italian,	Co. laborer,	33	S.	No. 7 Shaft,		Leg broken by fall of roof while building a cog pillar.
	23	Frank Hodick,	German,	Co. laborer,	43	M.	No. 7 Shaft,		Back painfully bruised by fall of roof.
June	11	Wm. Havard,	American,	Driver,	17	S.	No. 11 Shaft,		Thumb cut off while coupling cars while in motion.
	13	Michael Burke,	American,	Driver,	17	S.	Hoyte Shaft,		Face burned by gas while taking a car to face of breast.
	20	Paul Bonoiske,	Russian,	Laborer,	27	M.	Delaware Shaft,		Leg broken by flying coal from a blast.
	24	George Jehosky,	Polish,	Miner,	50	M.	Laflin Shaft,		Leg broken. Caught between car bumpers.
	25	John Peach,	Italian,	Miner,	39	M.	Butler Marcy Slope,		Leg broken by coal flying from a premature blast.
	25	Michael Farrell,	Irish,	Timberman,	34	S.	Mineral Spring,		Painfully bruised by fall of rock while timbering gangway.
	26	Wm. Lameraux,	American,	Co. laborer,	25	S.	No. 14 Shaft,		Leg cut off by fall of rock.
	27	John Provazano,	Italian,	Miner,	25	S.	No. 5 Shaft,		Leg broken by flying coal from blast.
July	1	William Stine,	American,	Slate boss,	21	S.	Laflin Breaker,		Jaw broken by lever while prying engine off center. Outside.
	2	Michael Wasaliss,	Polish,	Laborer,	34	S.	No. 14 Shaft,		Head cut and body bruised by fall of rock.
	3	Lewis Murena,	Italian,	Miner,	36	M.	Butler Slope,		Hand crushed by fall of rock.
	8	Frank Mitche,	Italian,	Miner,	32	S.	Heidelburg Shaft,		Arms and hand burned by powder he was handling.

TABLE 5.—Continued

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Name of Mine	County	Nature and Cause of Accident in Brief
July	12	Frank Kartsmartic,	Austrian,	Breaker footman,	42	M.	Mineral Spring Breaker,	Luzerne,	Leg crushed between car bumpers at foot of tower. Outside.
	13	Charles Laton,	Italian,	Miner,	28	M.	No. 4 Shaft,		Face and hands burned by gas.
	13	Phelix Cosolickie,	Lithuanian,	Miner,	39	M.	No. 14 Tunnel,		Back bruised by fall of rock.
	16	Joseph Clemis,	Hungarian,	Driver,	17	S.	Ridgewood Slope,		Leg broken. Struck by trip of cars on slope.
	18	Thomas Carr,	American,	Miner,	37	M.	No. 10 Shaft,		Leg broken by fall of middle rock.
	23	Moniz Teranizel,	Italian,	Miner,	33	M.	Fernwood Slope,		Jaw and nose broken by fall of rock at face.
	25	Joseph Pudinitas,	Lithuanian,	Miner,	38	M.	No. 7 Shaft,		Face and hands burned by gas.
	30	John Smith,	American,	Slatepicker,	14	S.	Butler Breaker,		Shoulder dislocated. Jumped off stair landing. Outside.
Aug.	2	Martin Shepaski,	Polish,	Mason,	51	S.	No. 14 Shaft,		Leg broken by rock falling from gob on him.
	20	Frank Sandus,	American,	Slope headman,	23	S.	Delaware Shaft,		Leg broken; struck by empty car on slope.
	22	John Eustice,	American,	Miner,	52	M.	No. 14 Tunnel,		Leg bruised by cave-in of roof while timbering the gangway.
	31	James O'Malia,	American,	Engineer,	29	S.	Butler Slope,		Leg broken by lever while prying engine off center.
Sept.	12	Charles Vetcovich,	Polish,	Laborer,	34	S.	No. 14 Shaft,		Head cut and bruised by fall of rock.
	13	Peter Koskoran,	Polish,	Laborer,	21	S.	No. 14 Shaft,		Leg broken by fall of rock while helping to stand a prop.
	13	John Munley,	American,	Slope headman,	19	S.	No. 1 Shaft,		Leg broken by mine car in rock tunnel.
	14	Wm. Miller,	Lithuanian,	Miner,	33	S.	No. 5 Shaft,		Arms and hands burned by gas, after firing a blast.
	18	Leo Neary,	American,	Doorboy,	16	S.	No. 5 Shaft,		Leg broken by car striking head block and coming back on him.
	18	Harry White,	English,	Co. miner,	61	M.	No. 14 Tunnel,		Leg broken by car. While loading it on slope, it tipped on him.
	20	Charles Gallagher,	Irish,	Chargeman,	46	M.	Laflin,		Face and hands burned by gas he ignited.
	23	Joseph Vachnus,	Polish,	Driver,	20	S.	No. 14 Tunnel,		Hips squeezed by cars while riding on bumper.
Oct.	4	Anthony Balachuna,	Lithuanian,	Laborer,	22	S.	Thomas Shaft,		Collar bone broken by piece of rock falling from roof.

Oct.	7	Michael Murphy,	Irish,	Laborer,	40	S.	No. 9 (Outside),	Luzerne,	Leg broken by falling off tresseling. Outside.
	11	Thomas Jereskie,	Polish,	Miner,	27	M.	Mineral Spring Shaft,		Seriously injured by fall of rock at face of gangway.
	19	George Luke,	Slavonian,	Track helper,	28	S.	Ewen,		Big toe cut off by car wheel going over it. Outside.
	19	Toney Farrio,	Italian,	Miner,	36	M.	Fernwood Slope,		Leg broken by car getting off track and catching him.
	24	George Steel,	American,	Bratticeman,	36	M.	No. 14 Shaft,		Hips squeezed by motor while running ahead of it.
Nov.	6	Thomas Smith,	American,	Door-boy,	16	S.	Laurel Run Slope,		Badly bruised by moving cars while running past them.
	7	William Humble,	American,	Assistant blacksmith,	19	S.	Clarence,		Leg broken by culm car while acting as brakeman. Outside.
	14	Eligue R. Scureman,	American,	Teamster,	60	M.	Laflin,		Leg broken by falling while carrying a box of glass. Outside.
	22	James Carroll,	Irish,	Watchman,	68	M.	Ewen Breaker,		Wrist broken. Fell down steps in breaker. Outside.
	25	Walter Karowsky,	Polish,	Miner,	30	S.	No. 5 Shaft,		Face and hands burned by gas. The fire boss told them to keep out until he had put up a length of brattice for them. They disobeyed and ignited the gas.
	25	Simon Bugin,	Polish,	Miner,	42	M.			
	25	Alex Stalaski,	Polish,	Laborer,	20	S.			
	27	Stanley Evans,	American,	Slatepicker,	15	S.	Pine Ridge Breaker,		Leg broken. Caught his foot in a belt he was helping to put on. Outside.
	29	John Cendrick,	Polish,	Miner,	38	M.	No. 14 Shaft,		Face and hands burned by gas. He went into an abandoned breast.
	29	Charles Waid,	American,	Miner,	29	M.	No. 14 Shaft,		Face and hands burned by gas he ignited after a blast.
	30	Michael Lovel,	Italian,	Miner,	43	M.	Butler Slope,		Hips bruised by fall of top coal in breast.
	30	Peter Daniel,	Lithuanian,	Miner,	53	M.	No. 5 Shaft,		Head severely bruised by blast that he thought had missed.
Dec.	4	William Millar,	American,	Driver,	17	S.	No. 9 Shaft,		Back bruised. Caught between car and roof.
	19	Francis Maloney,	American,	Driver,	18	S.	Mineral Spring Shaft,		Leg broken while sitting on car bumper. The stretcher caught on latch.
	21	Andrew Cropshock,	Polish,	Miner,	30	M.	Mineral Spring Shaft,		Leg broken by fall of rock at face of breast.
	23	Michael Teerpock,	Slavonian,	Miner,	29	M.	Laurel Run Slope,		Back bruised by premature blast.
	24	George Whitukinar,	Polish,	Miner,	52	M.	No. 14 Shaft,		Leg broken by premature blast.

FATAL ACCIDENTS

Falls of Coal, Slate and Roof

January 4, No. 8 Colliery, Pennsylvania Coal Company, George Progis, Polish, miner, was fatally injured and died in the evening. While barring down some loose coal after returning to the face of his breast in Marcy vein from firing a blast in top bench, a large piece of top coal fell and rolled on him.

January 11, Thomas Shaft, Hillside Coal and Iron Company, George Yalaska, Polish, miner, was fatally injured and died the same evening. While working out some loose coal at the face of his breast, Red Ash vein, the runner came to run his car out, and in doing so a large piece of rock and bone fell on him, Yalaska. He should have taken it down.

February 27, Pine Ridge Shaft, Hudson Coal Company, Joseph Melitz, Polish, miner, was instantly killed while working in his breast, Rock vein 29 Tunnel, first counter. He had fired a blast that knocked out two props and when he returned to the face to see the result a large slab of rock fell on him.

March 29, No. 14 Tunnel, Pennsylvania Coal Company, John Cunningham, English, miner, was instantly killed by a fall of top rock. He was about to move his drill machine from a hole he had drilled, to take the rock down, when the rock fell on him.

April 24, No. 14 Colliery, Pennsylvania Coal Company, John Kelly, Irish, miner, was fatally injured and died the next day. He fired a blast in the bottom bench of the Pittston vein and returning to see what the blast had done he found the middle rock was dangerous. He took his drill and went to pull it down, when it fell and caught him.

May 13, No. 1 Shaft, Pennsylvania Coal Company, John Kiggins, Irish, miner, was instantly killed. He was mining in the Red Ash vein, and had pulled down some loose bone and coal that was hanging along the rib of his breast. He then started to drill a hole, when a piece fell off the rib on him. There was a slip in the coal.

June 1, Ridgewood Slope, Traders' Coal Company, Angelo Share, Italian, laborer, was killed by fall of rock at the face of his breast, Red Ash vein, while loading a car of coal. The miner had carefully examined the roof just before the accident occurred.

June 6, Coal Brook Slope, Lehigh Valley Coal Company, Michael Durkin, American, driver, was instantly killed in Red Ash vein. At about 9 A. M. he went in the gangway to bring out a few loaded cars that had been loaded the night previous, and while pushing the cars together to couple them, a large fall of rock occurred where he was standing. There was a slip in the rock that was not seen until it fell.

June 19, No. 6 Shaft, Pennsylvania Coal Company, Joseph Kellar, Polish, miner, was killed by a fall of rock. He fired a blast and then returned to the face of the breast and started to mine out some loose coal from the blast. He neglected the middle rock in the vein above his head, which fell on him, breaking his neck.

June 25, Mineral Spring Shaft, Lehigh Valley Coal Company, Stephen Thompson, English, timberman, was killed by a fall of top rock on the gangway, while cutting a hitch in the rib to place the end of a set of timber he was about to stand to secure the roof.

July 6, Pine Ridge Shaft, Hudson Coal Company, Andrew Selopak, Slavonian, miner, was killed by fall of rock. He was helping his laborer to load a car with coal at face of his breast, Kidney vein, when a piece of rock fell on him.

July 31, Heidelburg No. 1 Slope, Lehigh Valley Coal Company, John Uraska, Austrian, miner, was killed by fall of rock. He had been forbidden to work in his breast, as the roof was bad and needed propping. He refused to stand props and was told by the boss to get out of the mine. He went in to get his tools, and went into an empty breast outside of the one he had been working in. He drilled a hole and fired it and went up to see what the result was when the roof rock fell on him.

August 3, Courtright Slope, Pennsylvania Coal Company, Frank Machuline, Italian, laborer, was killed by fall of roof rock. The miner had sounded the roof a few minutes before the accident occurred and while the laborer was loading a car of coal in the Airway Hillman vein, a large fall of rock fell and caught him under it.

August 22, No. 14 Tunnel, Pennsylvania Coal Company, Peter Flynn, Irish, company laborer, James O'Boyle, Irish, company miner, Joseph Griglar, German, company miner, and James Koneig, German, company miner, were killed by the caving-in of the overlying strata of rock in the Pittston or 14 Foot vein, caused by the general subsidence of the Checker seam overlying the Pittston vein, about 18 feet, which had been worked and abandoned. A rock tunnel had been driven from the Pittston vein up to the Diamond vein, there being 30 feet of rock between the Checker and Diamond veins, and a number of places were working in this vein. The coal was taken out along the gangway road in the Pittston vein, a distance of about 1,400 feet, to the foot of the slope. On August 6, I examined the timbering that was being done along this gangway and was informed by Lewis Sarge, the inside foreman, that it was necessary to take out the old timbers and put new ones in their place to make a more substantial job, and that he had a gang of men working at night doing the timbering, as the work could not be done while the drivers were going and coming with their trips of coal from the Diamond vein. On August 12, Mr. Sarge took all the men out of the Diamond vein and placed a double shift on the timbering, 17 men in all, to hurry up the job so that the miners could get back to work. On August 22, about 2 P. M. as the above named four men were busy preparing places to put the timber in, the cave-in suddenly occurred, covering them and John Eustice. Eustice was rescued about 8 P. M. the same evening. He was not more than twenty-five feet from the outer edge of the cave-in. His leg was slightly injured. A few minutes after Eustice was rescued a second cave-in took place and all hope of rescuing Boyle and Flynn, who were farther in the gangway, was abandoned, as the pillars and roof in both veins were working heavy and required immediate attention in order to protect those who were working to rescue the men under the rock. A large gang of workmen was placed cogging and timbering in the Checker and Pittston veins. Three shifts of workmen were engaged to clean up on the fallen gangway in order to reach the buried men. Great care was required on the part of the workmen and those in charge. The bodies of O'Boyle and Flynn were recovered August 29, and the bodies of Koneig and Griglar were recovered September 1 and 6. The indications were that Koneig and Griglar had been instantly killed by the fall.

The sudden caving-in of the roof in the Pittston vein was caused by the thinness of the rock between the Pittston and Checker veins. In my opinion the roof had been working for some time owing to the men working in the Diamond vein 30 feet above the Checker, but had not been discovered by the officials in charge, who said they had examined the old workings in the Checker vein nearly every day and failed to see any indication of a crush or creep in the old workings.

The fall certainly took place in the Checker under the workings of the Diamond vein and extended 500 feet from the Tunnel out along the Pittston vein gangway, and caught the men, who could not hear the working of the roof in the Checker vein and give them the warning necessary to get to a place of safety before the thin rock between the Pittston and Checker veins was crushed down on them so suddenly.

November 30, Thomas Shaft, Hillside Coal and Iron Company, Anthony Kopec, Polish, laborer, was killed by a fall of rock. The miner and the laborer had tried to pull this rock down a short time before the accident occurred but they were unable to do so. The miner told the laborer not to go under it, that he was going to drill a hole and fire it down. The laborer needed a few shovelfuls of coal to finish his car, and went under it when it fell on him.

Falling Down Shafts

February 23, Thomas Shaft, Hillside Coal and Iron Company, Joseph Ciracno, Italian, company laborer, was killed by falling down the shaft. He was working on the night shift unloading rock. After work the men whom he worked with went out of the mine by a surface opening but Ciracno refused to go with them and started out by the way of the shaft. He was not sure of the way, however, and asked the pumpman to show him the manway. The pumpman showed him the way from the Red Ash up to the Marcy vein and then left him. Finger-boards point the way out at each turn. When Ciracno reached the Marcy vein he walked out towards the shaft, opened a door and walked into the shaft. He was discovered by the fire boss the next morning dead.

May 28, Pine Ridge Shaft, Hudson Coal Company, Joseph Jermika. Polish, miner was killed by falling down the shaft. He and his laborer were being lowered down the shaft on the west side cage to go to work, this being their first shift. They both had lights. The laborer says the cage was going slowly and he told the miner not to step off as they had not reached the bottom, but the miner stepped off and fell down the shaft.

June 28, No. 10 Shaft, Pennsylvania Coal Company, John Gannon, American, trackman, was fatally injured by falling down the shaft. He was working on the 3 P. M. shift as chargeman, repairing the shaft, buntings and guides. He moved his platform up to take out a defective bunting and in getting upon this platform the bunting on which he stood gave way and he fell down the shaft.

Machinery

April 9, Fernwood Breaker, Hillside Coal and Iron Company, John Moffatt, American, breaker- oiler, was fatally injured and died after being taken to his home. He had been helping to repair a shaker while the machinery was stopped and the job had been completed. For some unknown reason he did not come away with the other men, and after the machinery started in coming out he had to step over a driving shaft. In doing so his overalls caught in the shaft and he was whirled around it.

June 4, No. 14 Shaft, Pennsylvania Coal Company, Richard McCawley, Irish, motor engineer, John Munley, American, driver boss, and Henry Waters, Irish, tracklayer, were killed. About 4.20 P. M. McCawley was coming out of the gangway in the Pittston vein with a trip of loaded mine cars and an empty car next to the motor in which a number of workmen were riding on their way home. When he came to the Marcy vein charging station, McCawley stopped to recharge his motor with air. He took his oil can and was busily engaged oiling the engine, while the brakeman was charging the boiler with air from the supply pipe, the pressure gauge showing 550 pounds. He shut the valve cutting off the air from the motor, when instantly the boiler on the motor exploded with such terrible force that he was blown to pieces. McCawley, the engineer, and John Munley, who were in the empty car, were instantly killed. Waters was fatally injured, dying the next day. The brakeman and one or two others were slightly injured. The boilers were comparatively new and showed upon examination of the pieces after the accident no corrosion or wear in any place. The motor boiler was made of five-eighths steel plate and supposed to carry a safe pressure of 1,000 pounds to the square inch. There was a pressure gauge on the boiler and a pop valve set to go off at a pressure of 550 pounds, which were in good working order.

June 28, Heidelburg No. 1 Breaker, Lehigh Valley Coal Company, James Flaherty, American, sweeper, was fatally injured and died the next day about 8.15 A. M. The engineer, thinking something was wrong with the elevators told Flaherty to watch his engine and in case anything should happen to shut off the steam and stop the engine. After the engineer had left the boy took the oil can and started to oil the eccentric cam of the engine. The can dropped from his hand, and in reaching over the eccentric to get it his clothing was caught and he was thrown against the fly wheel of the engine.

Explosion of Powder and Dynamite

December 14, Laflin Tunnel, Hudson Coal Company, Edward S. Walton, American, miner, and Joseph Corliss, Italian, laborer, were killed by an explosion of black powder and dynamite. He and his laborer had finished their day's work and went to their box. In filling their lamps, in some manner not known, they ignited the powder. Corliss was killed instantly and Walton died a few hours afterward.

Premature Blasts

March 12, Fernwood No. 5 Slope, Hillside Coal and Iron Company, John Saltuthi, Italian, miner, was instantly killed by a premature blast. While tamping a hole in the face of his breast, Ross vein, he first put four sticks of dynamite into the hole and then put in some black powder, and in tamping the hole the charge ignited.

July 29, No. 1 Shaft, Pennsylvania Coal Company, Michael Hopkins, American, miner, was fatally injured by a premature blast. While putting a cartridge in his breast in Red Ash vein it exploded and he was thrown against a prop and injured so badly that he died July 30.

September 16, No. 10 Shaft, Pennsylvania Coal Company, Andrew Konetiskie, Polish, miner, was instantly killed by flying coal from a blast. He was firing a blast in his breast in Marcy vein and had only retreated a few feet from the mouth of the hole when the blast exploded. He cut his match.

Cars

April 9, Coal Brook Slope, Lehigh Valley Coal Company, Andrew Coley, Polish, doorboy, was fatally injured by cars. He had finished his day's work and was coming outside. He got on the second rear loaded car to ride to the breaker, and when the locomotive started the trip of cars he fell off and the rear car passed over him. He died the same day at the Wilkes-Barre Hospital.

April 9, Yatesville Washery, Hillside Coal and Iron Company, Charles Senivich, Russian, company laborer, was fatally injured by cars. He was running a railroad car from the chute down on the branch. He was on the front end at the brake, and when the car struck a loaded car on the branch he fell between the bumpers. He died the same day at the Pittston Hospital.

July 26, Butler Marcy Slope, Hillside Coal and Iron Company, John Kelsey, Polish, trackman, was instantly killed by cars. He was standing at No. 4 lift waiting for an empty trip of cars that was going to the bottom lift. He stood close to the slope road and in some way the empty trip ran into the lift and struck him.

August 2, Heidelburg No. 2, outside, Lehigh Valley Coal Company, Paul Pramuk, American, slate picker, was instantly killed by cars. At the noon hour when he came out of the breaker a fierce storm of wind and rain started. He crawled under an empty car that stood on the weigh scales at the office, for shelter from the storm. A railroad car on the branch above, loaded with mine props, was set in motion by the wind and struck the car under which he had taken shelter and it ran over his body.

August 14, No. 6 Shaft, Pennsylvania Coal Company, Michael Steniski, Polish, company laborer, was fatally injured by cars. He jumped between two loaded cars of a trip that the driver was hauling out the gangway in the Marcy vein and was crushed between the car bumpers. He died the same day.

Gas

January 17, Pine Ridge Shaft, Hudson Coal Company, Augustine Vencent, Polish, miner, was fatally burned by gas. He returned to the face of his breast in the Rock vein after firing a blast, which cut a feeder of gas, and ignited the gas by an open light on his head. He died January 23.

May 15, No. 4 Shaft, Pennsylvania Coal Company, Giamino Viano, Italian, miner was fatally burned by gas. He fired a blast in face of his breast, which broke the brattice down. He kept on working at the face and gas accumulated, which in a short time he ignited with his open light. He died May 18.

July 20, No. 14 Shaft, Pennsylvania Coal Company, Domnic Millewski, Polish, miner, and Frank Petrashepkie, Polish, miner, were fatally burned by gas. They went into an old worked out breast in the Pittston vein, climbed on top of a high gob and ignited gas that had accumulated in a hole in the roof that had been made by a fall. In order to get into the breast they crawled under a board put up as a danger signal which contained the words, "Gas—Keep Out."

September 28, Mineral Spring Shaft, Lehigh Valley Coal Company, Quantella Magasoli, Italian, miner, was fatally burned by gas. He and his laborer left the place where they were working and crawled up an old abandoned pitching breast where they had formerly worked, to hunt for lost tools. The miner ignited a small body of gas at the face, which set his clothing on fire, and he was so badly burned that he died the next day.

Miscellaneous

January 18, Heidelburg No. 1 Breaker, Lehigh Valley Coal Company, Peter Kashew, Slavonian, driver, was fatally kicked by a mule he was driving. While pulling a car of rice coal from the washery to the fire room the mule balked. The driver took a piece of stick and began to strike the mule when it kicked him. Died January 26.

March 11, No. 6 Washery, Pennsylvania Coal Company, Charles Alex, Italian, company laborer, was smothered in the culm bank. He was pouring a stream of water on the bank with a hose. The boss bankman told him to get away, as there was danger of a rush of the bank. Alex did not leave at once and a slide took place and caught him.

March 14, Hoyte Shaft, Pennsylvania Coal Company, James Heslin, American, mine foreman, was fatally injured. He was making an examination of the old workings in the Pittston or 14 Foot vein, in company with the fire boss, and in coming down a steep pitch Heslin slipped and fell, cutting his hand on a piece of coal. Died March 24 from blood poison.

April 28, No. 1 Shaft, Pennsylvania Coal Company, Peter Hines, American, driver, was instantly killed. He went up the shaft with the footman to rock tunnel to take a car of rock off the cage to send it outside. When the cage was passing down the chute Hines put his head through an opening in the partition to watch it, and the bonnet on the cage struck him on the head.

June 28, No. 6 Shaft, Pennsylvania Coal Company, Fiski Davido, Italian, company laborer, was killed by the cage. He was helping to tend cars at the foot of the shaft. As a car was being run on to the cage at the Clarke vein landing the boss footman took hold of the empty car, that had been knocked off the cage by the loaded car, to prevent it running into a driver who was coming with his trip of empty cars, and in doing so he took hold of the post where the electric bell button is installed and unknowingly gave the engineer the signal to hoist. The engineer hoisted the cage and car up to the roof of the vein and caught Davido, breaking his neck.

July 22, Fernwood Breaker, Hillside Coal and Iron Company, William Langan, Irish, slate picker, was fatally injured. While the breaker was stopped on account of the rolls being blocked with coal, Langan climbed on an overhead beam about 9 feet in height to throw dust on the boys below and while doing so he fell down and struck the side of the chute. Died the evening of the same day.

November 2, Fernwood Colliery, Hillside Coal and Iron Company, John H. Williams, Welsh, general foreman, and Carman Mankelon, Italian, miner, were killed. The breaker of the Fernwood Colliery caught fire during the night, and Williams immediately went to take charge of fighting the flames, but the breaker burned to the ground. The current for the electric lights was generated at the Butler Colliery, one and a half miles away. After the fire was over Williams started for home and seeing that the wire carrying the current had sagged down, he took hold of it and received a shock of 2,300 volts. In the early morning Mankelon seeing Williams lying on the ground took hold of him to lift him up when he also was instantly killed by the electric current.

December 3, No. 8 Shaft, Pennsylvania Coal Company, Thomas Leonard, American, driver, was killed while coming up the shaft in a bucket. The billy that prevents the bucket from swinging, got stuck in the shaft from some cause, and the vibration of the rope started it down the shaft, striking the boy in the bucket.

CONDITION OF COLLIERIES

PENNSYLVANIA COAL COMPANY

Number 1 Shaft.—Ventilation good, drainage fair. Condition as to safety good.

Number 8 Shaft.—Ventilation and drainage good. Condition as to safety fair.

Number 4 Shaft.—Ventilation fair, drainage good. Condition as to safety fair.

Number 7 Shaft.—Ventilation and drainage good. Condition as to safety good.

Hoyte Shaft.—Ventilation and drainage fair. Condition as to safety fair.

Number 5 Shaft.—Ventilation fair, drainage bad. Condition as to safety fair.

Number 6 Shaft.—Ventilation fair, drainage bad. Condition as to safety fair.

Number 11 Shaft.—Ventilation and drainage fair. Condition as to safety good.

Number 9 Shaft.—Ventilation and drainage good. Condition as to safety good.

Number 10 Shaft.—Ventilation good, drainage fair. Condition as to safety good.

Number 14 Shaft.—Ventilation and drainage fair. Condition as to safety fair.

Number 14 Tunnel.—Ventilation and drainage good. Condition as to safety fair.

Courtright Slope.—Ventilation good, drainage fair. Condition as to safety good.

LEHIGH VALLEY COAL COMPANY

Mineral Spring Shaft.—Ventilation and drainage fair. Condition as to safety fair.

Mineral Spring Slope.—Ventilation fair, drainage bad. Condition as to safety good.

Coal Brook Slope.—Ventilation and drainage fair. Condition as to safety good.

Coal Brook Tunnel.—Ventilation and drainage fair. Condition as to safety good.

Heidelburg No. 1 Slope.—Ventilation good, drainage fair. Condition as to safety good.

Heidelburg No. 2 Slope.—Ventilation fair, drainage bad. Condition as to safety good.

Heidelburg Shaft.—Ventilation good, drainage fair. Condition as to safety good.

HILLSIDE COAL AND IRON COMPANY

Butler Marcy Slope.—Ventilation fair, drainage good. Condition as to safety good.

Butler Checker Slope.—Ventilation fair, drainage good. Condition as to safety fair.

Thomas Shaft.—Ventilation good, drainage fair. Condition as to safety good.

Fernwood No. 1, Slope.—Ventilation and drainage fair. Condition as to safety good.

Fernwood No. 5 Slope.—Ventilation and drainage fair. Condition as to safety fair.

Clarence No. 1 Slope.—Ventilation fair, drainage good. Condition as to safety fair.

Clarence No. 2 Slope.—Ventilation and drainage fair. Condition as to safety good.

HUDSON COAL COMPANY

Laurel Run Slope.—Ventilation and drainage good. Condition as to safety good.

Pine Ridge Shaft.—Ventilation and drainage fair. Condition as to safety fair.

Laflin Shaft.—Ventilation good, drainage fair. Condition as to safety good.

Laflin Tunnel.—Ventilation and drainage fair. Condition as to safety good.

DELAWARE AND HUDSON COMPANY

Delaware Shaft.—Ventilation and drainage good. Condition as to safety fair.

TRADERS' COAL COMPANY

Ridgewood Slope.—Ventilation and drainage fair. Condition as to safety good.

IMPROVEMENTS

PENNSYLVANIA COAL COMPANY

No. 14 Colliery.—Marcy vein engine house, 23′x41′x12′ high. 1 15″x36″ single engine to run fan. 1 pair Gerard engines, 15″x36″.

Courtright Slope.—1 Brick fan and engine house, 38′x28′x14′. 1 20′ fan, 6′x6′7″. 1 Pair 17″x36″ engines and house, 23′x41′x12′ high. 3 250 H. P. Locomotive boilers, asbestos covered. 1 Feed pump, 12x8x12. 1 Heater completed. 1 Fuel conveyor, 390′ centers, 10 1-8″ pitch chain complete. 1 6″x8″ Horizontal engine to run conveyor line. 1 Brick powder house, 12′x14′ 8 feet high.

Courtright Slope, Inside.—The slope in the Hillman vein has been sunk 400 feet during the year. From Hillman vein to Diamond vein, rock slope, about 700 feet. Sectional area, 7′x12′ pitch 20 per cent.

Drifts, Inside.—The slope in the Diamond vein from the surface down 1,000 feet. Lifts have been opened to the right and left. Sectional area, 7′x12′, pitch 10 per cent.

In the D. and H. tunnel, Big vein, the slope has been extended 400 feet, sectional area, 12′x10′, pitch 15 per cent.

Big Vein Shaft, Inside.—New slope from south pitch to back basin has been extended 600 feet.

Checker Vein Shaft, Inside.—Slope from west level heading down No. 3 slope, 600 feet engine plane is extended 700 feet.

Breaker, Outside.—1 30′x18′ Brick addition to miners' shifting shanty. 1 12′x12′x10′ high, brick addition to compressor house, used as a pump house. 1 Hoisting engine house from Big vein, brick, 45′ x37′x12′ high, with separator annex, 10′x11′x10′ high. 30′x30′x14′ high, brick addition to machine shop. 21′x46′x14′ high, brick addition to carpenter shop. 1 friction hoist ash plane at breaker with iron fire-proof building. 1 Electric light engine and house 13′x38′, with McEwen horizontal type 600 light generator engine. 1 New outside barn (frame) 22′x75′.

No. 9 Colliery.—One shifting shanty, oil house and record building, size 16′x100′, made of brick. One general foreman's office, size 26′x50′, made of brick. One oil house, size 14′x16′, made of brick. One powder house, size 14′x14′, made of brick. The oil house is equipped with the modern self measuring oil tanks.

Mine Foremen's Examinations

The annual examination of applicants for certificates of qualification as Mine Foremen and Assistant Mine Foremen, was held in the Y. M. C. A. Rooms, Pittston, May 14 and 15.

The board was composed of the following members: Hugh McDonald, Inspector, Pittston; James J. McCartey, superintendent, Luzerne; David P. Williams, Pittston, and Michael J. Healey, Avoca, miners.

The following persons were recommended for certificates:

Mine Foremen

Richard May, Lopez; John Deans, Duryea; Michael Langan, Pittston.

Assistant Mine Foremen

Charles J. Reilley, Thomas J. Llewellyn, George H. Adams, Edward J. Reap, Frank W. Carey, Francis Conaboy, Thomas Ridgley, Maurice M. Johnson, Charles T. Birbeck, and Samuel F. Bosley, of Avoca; Allan Moffatt, James M. Moore, John Gilroy, John F. Gates, Frank Hopkins, Thomas J. McNevin and John Cavanaugh, of Pittston; Jonathan Parker, John Wynne, Thomas Clark, Patrick Clark, and James Conlon, of Inkerman; Benjamine G. Thomas and Richard T. Jones, of Parsons; David Price, Hudson; John Munley, Plains; Newman Hewitt, Luzerne; John B. Roche, Maltby; John Burke, Port Griffith; William H. Davies, Edwardsville.

Seventh District

LUZERNE COUNTY

Wilkes-Barre, Pa., February 29, 1908.

Hon. James E. Roderick, Chief of Department of Mines:

Sir: I have the honor to transmit herewith my annual report as Inspector of Mines for the Seventh Anthracite District, for the year ending December 31, 1907.

The report contains the statistical information required by law, with a brief description of the fatal accidents and the condition of the mines.

Respectfully submitted,

THOMAS H. PRICE,

Inspector.

SUMMARY OF STATISTICS

Number of collieries,	13
Number of mines,	42
Number of mines in operation,	42
Number of tons of coal shipped to market,	3,765,500
Number of tons used at mines for steam and heat,	419,302
Number of tons sold to local trade and used by employes,	231,073
Number of tons produced,	4,415,875
Number of tons produced by compressed air machines,	—
Number of tons produced by electrical machines,	—
Number of persons employed inside of mines,	6,190
Number of persons employed outside,	2,406
Number of fatal accidents inside of mines,	42
Number of fatal accidents outside,	4
Number of non-fatal accidents inside of mines,	101
Number of non-fatal accidents outside,	18
Number of tons of coal produced per fatal accident inside,	105,139
Number of persons employed per fatal accident inside,	147
Number of persons employed per fatal accident outside,	601
Number of persons employed per non-fatal accident inside,	61
Number of persons employed per non-fatal accident outside,	133
Number of wives made widows,	32
Number of children orphaned,	71
Number of steam locomotives used outside,	25
Number of compressed air locomotives used inside,	9
Number of electric motors used inside,	8
Number of fans in use,	43
Number of gaseous mines in operation,	40
Number of non-gaseous mines in operation,	2

TABLE A

PRODUCTION OF COAL

Names of Operators	Tons
Lehigh Valley Coal Company,	1,724,884
Lehigh and Wilkes-Barre Coal Company,	1,625,502
Delaware and Hudson Company,	752,113
Red Ash Coal Company,	229,585
Wilkes-Barre and Scranton Coal and Iron Company,	63,127
Miners' Mills Coal Mining Company,	20,664
Total,	4,415,875

Production by Counties

Luzerne,	4,415,875

TABLE B.—Fatal and non-fatal accidents inside and outside of mines; number of tons of coal produced per accident; number of persons employed; number employed per accident

Names of Operators	Fatal Accidents			Non-fatal Accidents			Tons of coal produced per fatal accident inside	Tons of coal produced per non-fatal accident inside	Number of employes inside	Number of employes outside	Total number of employes	Number of employes inside per fatal accident	Number of employes outside per fatal accident	Number of employes inside per non-fatal accident	Number of employes outside per non-fatal accident
	Inside	Outside	Total	Inside	Outside	Total									
Lehigh Valley Coal Co.,	15	....	15	34	5	39	114,992	50,732	2,117	778	2,895	141	....	62	155
Lehigh and Wilkes-Barre Coal Co.,	22	2	24	38	10	48	73,886	43,932	2,694	832	3,526	122	416	73	76
Delaware and Hudson Co.,	3	1	4	14	1	15	250,704	53,722	850	430	1,280	283	430	61	430
Red Ash Coal Co.,	2	1	3	5	2	7	114,792	45,917	279	267	546	139	267	56	133
Wilkes-Barre and Scranton Coal and Iron Co.,	....	....	....	9	....	9	....	7,014	167	69	236	....	....	18	....
Miners' Mills Coal Mining Co.,	....	....	....	1	....	1	....	20,664	83	30	113	....	....	83	....
Totals and averages for district,	42	4	46	101	18	119	105,139	44,158	6,190	2,406	8,596	147	601	61	133

TABLE C.—Classification of Fatal Accidents Inside and Outside of Mines

	Months													
	January	February	March	April	May	June	July	August	September	October	November	December	Totals	Percentages
Causes of Accidents Inside														
Falls of coal,	1	....	....	....	....	1	....	1	....	....	2	...	5	11.90
Falls of roof,	2	1	1	4	1	2	....	1	....	1	....	1	14	33.33
Mine cars,	....	....	....	2	....	...	....	2	1	1	1	...	7	16.67
Explosions of gas and dust,	....	....	....	....	....	....	....	1	4	....	2	....	7	16.67
Suffocation by gas, etc.,	....	....	....	1	....	....	....	....	....	....	....	...	1	2.38
Explosions of powder and dynamite,	....	....	....	....	....	....	....	1	....	....	....	...	1	2.38
Premature blasts,	1	....	....	1	1	....	....	1	1	....	....	1	6	14.29
Miscellaneous,	....	....	....	....	....	....	....	....	1	....	....	...	1	2.38
Totals,	4	1	1	8	2	3	....	7	7	2	5	2	42	100.00
Causes of Accidents Outside														
Cars,	....	....	....	....	....	....	....	....	1	1	....	....	2	50.00
Machinery,	....	....	....	1	....	....	....	....	....	....	....	....	1	25.00
Miscellaneous,	....	....	....	....	....	1	....	....	....	....	....	...	1	25.00
Totals,	....	....	....	1	....	1	....	....	1	1	....	...	4	100.00
Grand totals inside and outside,	4	1	1	9	2	4	....	7	8	3	5	2	46	......

TABLE D.—Classification of Non-fatal Accidents Inside and Outside of Mines

	Months													
	January	February	March	April	May	June	July	August	September	October	November	December	Totals	Percentages
Causes of Accidents Inside														
Falls of coal,	....	2	....	....	2	....	1	....	1	....	1	....	7	6.93
Falls of slate,	....	....	....	....	1	....	....	....	....	....	....	....	1	.99
Falls of roof,	3	4	1	....	1	3	1	1	1	2	....	1	18	17.82
Mine cars,	2	2	6	4	7	....	3	1	2	2	4	1	34	33.67
Explosions of gas and dust,	1	3	....	2	....	....	1	2	1	...	3	....	13	12.87
Explosions of powder and dynamite,	1	....	1	1	....	....	....	....	....	....	1	....	4	3.96
Premature blasts,	1	3	1	2	....	....	2	1	2	....	....	....	12	11.88
Mules,	....	....	1	1	....	....	1	....	....	....	....	....	3	2.97
Miscellaneous,	....	2	....	....	1	....	1	3	....	2	....	....	9	8.91
Totals,	8	16	10	10	12	3	10	8	7	6	9	2	101	100.00
Causes of Accidents Outside														
Cars,	2	....	3	2	....	....	1	2	....	....	....	....	10	55.55
Machinery,	....	....	....	....	....	1	1	....	....	1	....	....	3	16.67
Miscellaneous,	2	....	1	....	....	....	....	....	1	....	1	....	5	27.78
Totals,	4	....	4	2	....	1	2	2	1	1	1	....	18	100.00
Grand totals inside and outside,	12	16	14	12	12	4	12	10	8	7	10	2	119	

TABLE E.—Occupations of Persons Killed or Fatally Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Inside													
Miners,	3	1	1	5	1	2	....	3	2	....	3	2	23
Miners' laborers,	1	....	....	1	1	....	....	1	....	1	....	....	5
Drivers and runners,	....	....	....	1	....	....	....	2	....	....	1	....	4
Doorboys and helpers,	....	....	....	....	....	....	....	....	4	....	....	....	4
Company men,	....	....	....	....	....	1	....	....	....	1	1	....	3
All other employes,	....	....	....	1	....	....	....	1	1	....	...	....	3
Totals,	4	1	1	8	2	3	....	7	7	2	5	2	42
Outside													
Blacksmiths and carpenters,	....	....	....	....	....	1	....	....	....	....	....	....	1
Slatepickers (boys),	....	....	....	1	....	....	....	....	....	....	....	....	1
All other emplcyes,	....	....	....	....	....	....	....	....	1	1	....	....	2
Totals,	....	....	....	1	....	1	....	....	1	1	....	....	4
Grand totals inside and outside,	4	1	1	9	2	4	....	7	8	3	5	2	46

TABLE F.—Occupations of Persons Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Inside													
Fire bosses and assistants,	....	....	....	....	....	1	....	....	....	....	...	....	1
Miners,	1	6	3	1	2	....	3	3	2	1	4	1	27
Miners' laborers,	4	6	....	4	4	....	2	2	2	1	4	1	30
Drivers and runners,	2	2	5	1	4	....	4	2	1	2	1	....	24
Doorboys and helpers,	....	1	2	2	1	....	....	....	....	....	....	....	6
Company men,	1	....	....	....	1	....	....	...	....	....	....	....	2
All other employes,	....	1	....	2	....	2	1	1	2	2	...	....	11
Totals,	8	16	10	10	12	3	10	8	7	6	9	2	101
Outside													
Foremen,	1	....	....	....	....	....	....	....	....	....	....	....	1
Blacksmiths and carpenters,	....	....	....	....	....	....	1	....	....	....	....	....	1
Engineers and firemen,	....	....	....	....	....	....	....	....	1	....	....	....	1
Slatepickers (boys),	....	....	....	....	....	....	1	....	....	1	....	....	2
All other employes,	3	....	4	2	....	1	....	2	....	....	1	....	13
Totals,	4	....	4	2	....	1	2	2	1	1	1	....	18
Grand totals inside and outside,	12	16	14	12	12	4	12	10	8	7	10	2	119

TABLE G.—Nationality of Persons Killed or Fatally Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
American,	....	....	....	....	....	1	....	2	1	....	1	....	5
English,	....	....	....	1	....	2	....	....	....	....	....	....	3
Welsh,	....	....	....	....	....	....	....	....	2	1	....	....	3
Irish,	....	....	....	1	1	....	....	....	2	....	....	....	4
German,	....	....	....	1	....	....	....	....	....	1	....	....	2
Polish,	2	1	1	2	....	1	....	4	2	1	3	1	18
Hungarian,	....	....	....	....	1	....	....	....	1	....	....	....	2
Italian,	....	....	....	1	....	....	....	....	....	....	....	....	1
Slavonian,	....	....	....	2	....	....	....	....	....	....	....	....	2
Lithuanian,	1	....	....	1	....	....	....	1	....	....	1	1	5
Russian,	1	....	....	....	....	....	....	....	....	....	....	....	1
Totals,	4	1	1	9	2	4	....	7	8	3	5	2	46

TABLE H.—Nationality of Persons Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
American,	3	4	5	1	4	1	2	3	2	2	....	....	27
English,	....	1	....	....	1	....	1	....	....	....	....	....	3
Welsh,	....	1	1	2	1	3	1	....	....	1	....	....	10
Irish,	2	1	1	....	....	....	....	3	1	....	1	....	9
German,	1	....	....	....	....	....	....	1	....	....	....	....	2
Polish,	4	6	2	4	3	....	5	3	3	3	3	1	37
Hungarian,	1	....	....	....	....	....	....	....	....	....	....	....	1
Italian,	1	....	1	....	....	....	1	...	....	....	....	....	3
Slavonian,	....	2	2	3	1	....	1	....	1	....	2	1	13
Lithuanian,	....	....	....	1	....	....	....	....	....	....	3	....	4
Austrian,	....	1	....	1	....	....	....	...	....	....	1	....	3
Russian,	....	....	2	....	2	....	1	....	1	....	....	....	6
Syrian,	....	....	....	....	....	....	....	....	....	1	....	....	1
Totals,	12	16	14	12	12	4	12	10	8	7	10	2	119

TABLE I.—Operators and mines, kind of openings, type and size of fans, size of furnaces, volume of air produced by fan or furnace per minute, number of splits of air currents, and number of persons employed inside

Names of Operators and Mines	Kind of opening	Gaseous or non-gaseous	Method of ventilation	Diameter of fan in feet	Width of blades in feet	Depth of blades in feet	Number of revolutions per minute	Water gauge developed—in inches	Name of fan	Power used	Area of furnace bars in square feet	Number of splits of air currents	Number of cubic feet of air per minute entering the mine at inlet	Total quantity of air per minute circulating in all the splits in cubic feet	Number of persons employed inside
Lehigh Valley Coal Co.															
Prospect Colliery:															
Oakwood,	Shaft,..	Gaseous,.	2 Fans,..	30	9	8	50	1.65	Guibal,	Steam,.....	....	5	42,375	28,193	105
Midvale,	Shaft,..		Fan,.....	30	9	8	50	1.65			....	7	138,460	96,320	265
Hillman,	Slope,..		Fan,.....	20	6.6	5.3	66	1.5			....	5	93,470	87,010	170
	Slope,..		Double Fan,	15	4.6	3.8	80	1			....	3	60,439	57,296	120
Wyoming,	Shaft,..		Fan,.....	25	7	6	37	.9			....	8	101,795	92,020	122
Henry Red Ash,	Shaft,..		Fan,.....	28	6.6	7.6	37	.9			....	2	93,610	86,540	127
Henry,	Shaft,..		2 Fans,..	30	10	8	50	1.5			....	6	123,365	81,080	163
Henry Five Foot,	Slope,..		Fan,.....	28	6.6	7.6	46	.8			....	2	66,661	56,431	70
Dorrance Colliery:															
Baltimore,	Shaft,..	Gaseous,.	Fan,.....	35	12	10.2	47	1.9	Guibal,	Steam,.....	....	9	159,534	127,487	305
Hillman,	Shaft,..		Fan,.....	30	10	8	54	1.9			....	8	152,672	112,329	105
Franklin Colliery:															
Rock,	Slope,..	Gaseous,.	2 Fans,..	20	6.0	5.9	75	1.5	Guibal,	Steam,.....	....	10	110,800	73,300	252
Rock,	Slope,..			14	6.0	4	90	.5			....	2	35,700	25,900	63
Long,	Slope,..		2 Fans,..	15	4.6	4.6	90	.8			....	....	....	....	......
Long,	Slope,..			15	4.6	4.6	90	.8			....	3	45,200	25,400	73
Sump,	Slope,..		Fan,.....	15	6	3.9	75	.8			....	2	35,600	13,000	73

Lehigh and Wilkes-Barre Coal Co.															
Hollenback No. 2 Colliery:															
Hollenback No. 1,	Shaft,	Gaseous,	2 Fans,	35	11.9	8.9	48	1.25	Guibal,	Steam,	....	9	265,470	228,220	343
Hollenback No. 2,*	Shaft,			35	11.9	8.9	48	1.25							
Hollenback No. 3,	Slope,		2 Fans,	35	11.6	8.9	48	1.25	Guibal,	Steam,	....	5	126,200	107,910	89
Hollenback No. 5,*	Slope,			24	7.11	6.0	75	1.25							
So. Wilkes-Barre No. 5 Colliery:															
South Wilkes-Barre No. 1,	Shaft,	Gaseous,	2 Fans,	35	11.9	8.9	45	1.60	Guibal,	Steam,	....	16	190,640	169,520	316
South Wilkes-Barre No. 2,*	Shaft,			35	11.9	8.9									
South Wilkes-Barre No. 3,	Shaft,		2 Fans,	35	11.9	8.9	45	1.80	Guibal,	Steam,	....	16	343,000	284,900	334
South Wilkes-Barre No. 5,*	Shaft,			35	11.9	8.9									
Stanton No. 7 Colliery:															
Stanton No. 7,	Shaft,	Gaseous,	2 Fans,	35	11.7	8.9	45	1.90	Guibal,	Steam,	....	18	268,580	237,060	484
Stanton No. 4,*	Slope,			34.6	11.9	8.4½	......	......							
Empire No. 4,	Shaft,		Fan,	24	8.0	6.0	60	1.50	Guibal,	Steam,	....	7	115,750	86,850	134
Maxwell No. 20 Colliery:															
Baltimore,	Shaft,	Gaseous,	4 Fans,	35	11.9	8.9	45	1.50	Guibal,	Steam,	....	24	438,150	409,310	616
Red Ash,	Shaft,			35	11.9	8.9	45	1.50							
Hillman,	Slope,			25	8.2	6.3	80	2.40							
Baltimore,*	Shaft,			24	8.0	6.0	80	2.40							
Red Ash,*	Shaft,			......	......	......	......	......							
Hillman,*	Slope,			......	......	......	......	......							
Delaware and Hudson Co.															
Baltimore No. 5 Colliery:															
Baltimore No. 5,	Shaft,	Gaseous,	2 Fans,	28	7	5.6	......	......	Guibal,	Steam,	....	....	176,450	156,550	180
Baltimore No. 2,	Shaft,	Gaseous,	Fan,	17.5	5.3	4.8	56	2.4			....	7	112,345	100,890	128
Baltimore Tunnel Colliery:															
Baltimore,	Tunnel,	Gaseous,	Double Fan,	18	6	5	65	1.1	Guibal,	Steam,	....	5	101,704	73,699	173
G. Vein,	Slope,	Gaseous,	Fan,	8	3.0	2.2	......	5			....	3	22,600	18,600	66
Conyngham Colliery:															
Baltimore,	Shaft,	Gaseous,	Double Fan,	17	5.4	4	90	1.8	Guibal,	Steam,	....	3	86,190	80,720	112
Hillman,	Shaft,	Gaseous,	Fan,	20	5.8	5	78	1.7			....	5	134,460	123,240	124
Red Ash Coal Co:															
Red Ash No. 1,	Slope,	Non-gas.	Fan,	15	5	3.9	80	1.5	Vulcan,	Steam,	....	4	58,000	51,000	146
Red Ash No. 2,	Slope,	Non-gas.	Fan,	15	5	3.9	72	1.5			....	4	53,120	14,740	111
Wilkes-Barre and Scranton Coal and Iron Co.															
Hillman,	Shaft,	Gaseous,	Fan,	30	10	8	30	1.5	Tamaqua,	Steam,	....	2	36,010	21,860	88
Miners' Mills Coal Mining Co.															
Healey,	Slope,	Gaseous,	Fan,	16	4.25	4	60	1	Guibal,	Steam,	....	2	16,100	14,800	58

*Emergency fans.

TABLE 1.—Operators, location of collieries, railroads, etc

Names of Operators and Collieries	County	Name of General Superintendent	Post Office	Name of Superintendent	Post Office	Railroad to Mine
Lehigh Valley Coal Co.						
Prospect,	Luzerne,	S. D. Warriner,	Wilkes-Barre,	Thomas Thomas,	Wilkes-Barre,	Lehigh Valley
Dorrance,						
Franklin,						
Franklin Washery,						
Henry Washery,						
Prospect Washery,						
Lehigh and Wilkes-Barre Coal Co.						
Hollenback No. 2,	Luzerne,	C. F. Huber,	Wilkes-Barre,	William H. Herring (Outside) M. R. Morgans, (Inside)	Wilkes-Barre,	C. R. R. of N. J.
South Wilkes-Barre No. 5,						
Stanton No. 7,						
Maxwell No. 20,						
Jersey Washery No. 8,						
Delaware and Hudson Co.						
Baltimore No. 5,	Luzerne,	C. C. Rose,	Scranton,	E. R. Pettebone,	Dorranceton,	Delaware and Hudson
Baltimore Tunnel,						
Conyngham,						
Baltimore No. 5 Washery,						
Baltimore Tunnel Washery,						
Conyngham Washery,						
Baltimore Slope Washery,						
Red Ash Coal Co.						
Red Ash No. 1,	Luzerne,	S. V. Tench,	Wilkes-Barre,	S. V. Tench,	Wilkes-Barre,	C. R. R. of N. J.
Red Ash No. 2,						
Wilkes-Barre and Scranton Coal and Iron Co.						
Hillman,	Luzerne,	J. D. Caryl,	Wilkes-Barre,	J. D. Caryl,	Wilkes-Barre,	Lehigh Valley
Miners' Mills Coal Mining Co.						
Healey,	Luzerne,	M. J. Healey,	Plains,	A. J. Duffy,	Plains,	Lehigh Valley

TABLE 2.—Number of tons of coal mined, number of days worked, number of persons employed, number killed and injured, quantity of powder and dynamite used, etc.

Names of Operators and Collieries	County	Number of tons of coal shipped to market	Number of tons used at collieries for steam and heat	Number of tons sold to local trade and used by employes	Total production of coal in tons	Number of days worked	Number of employes	Number of fatal accidents	Number of non-fatal accidents	Number of kegs of powder used	Number of pounds of dynamite used	Number of horses and mules
Lehigh Valley Coal Co.												
Prospect,	Luzerne,	777,315	46,459	3,648	827,422	258	1,642	8	24	25,152	353,067	272
Dorrance,		231,539	28,400	64,234	324,173	218	671	5	9	9,939	52,881	98
Franklin,		204,200	26,779	6,318	237,297	250	483	2	6	8,745	5,838	83
		1,213,054	101,638	74,200	1,388,892	......	2,796	15	39	43,836	411,786	453
Washeries:												
Franklin,	Luzerne,	152,808	....	....	152,808	......	41	......	......	....	....	......
Henry,		113,898	40,150	....	154,048	......	46	......	......	....	....	3
Prospect,		29,136	....	....	29,136	......	12	......	......	....	....	......
		295,842	40,150	....	335,992	......	99	......	......	....	....	3
Totals,		1,508,896	141,788	74,200	1,724,884	......	2,895	15	39	43,836	411,786	456
Lehigh and Wilkes-Barre Coal Co.												
Hollenback No. 2,	Luzerne,	223,505	41,766	30,917	296,188	208	666	1	6	8,702	29,650	83
South Wilkes-Barre No. 5,		368,049	33,126	87,582	488,757	231	1,073	15	19	13,352	90,850	134
Stanton No. 7,		427,208	44,300	9,729	481,237	232	1,031	7	16	16,612	32,666	123
Maxwell No. 20,		269,717	34,368	6,760	310,845	129	739	1	6	8,187	40,175	107
		1,288,479	153,560	134,988	1,577,027	......	3,509	24	47	46,853	193,341	447
Jersey Washery No. 8,	Luzerne,	44,025	3,527	923	48,475	......	17	......	1	....	....	2
Totals,		1,332,504	157,087	135,911	1,625,502	......	3,526	24	48	46,853	193,341	449

TABLE 2.—Continued

Names of Operators and Collieries	County	Number of tons of coal shipped to market	Number of tons used at collieries for steam and heat	Number of tons sold to local trade and used by employes	Total production of coal in tons	Number of days worked	Number of employes	Number of fatal accidents	Number of non-fatal accidents	Number of kegs of powder used	Number of pounds of dynamite used	Number of horses and mules
Delaware and Hudson Co.												
Baltimore No. 5,	Luzerne,	65,267	6,319	....	71,586	61	43	2	2	2,755	461	40
Baltimore Tunnel,	Luzerne,	331,978	7,834	3,706	343,518	236	879	1	9	9,345	4,630	80
Conyngham,	Luzerne,	105,239	13,042	3,270	121,551	159	328	1	4	3,490	2,683	38
		502,484	27,195	6,976	536,655	......	1,250	4	15	15,590	7,774	158
Washeries:												
Baltimore No. 5,	Luzerne,	8,064	1,943	....	10,007	......	......	......	......	......	......	......
Baltimore Tunnel,	Luzerne,	41,794	54,465	....	96,259	......	......	......	......	......	......	......
Conyngham,	Luzerne,	4,800	7,041	....	11,841	......	......	......	......	......	......	......
Baltimore Slope,	Luzerne,	92,276	5,075	....	97,351	......	30	......	......	......	......	......
Totals,		146,934	68,524	....	215.458	......	30	......	......	......	......	......
		649,418	95,719	6,976	752,113	......	1,280	4	15	15,590	7,774	158
Red Ash Coal Co.												
Red Ash Nos. 1 and 2,	Luzerne,	211,636	9,969	7,980	229,585	197	546	3	7	2,987	14,725	50
Wilkes-Barre and Scranton Coal and Iron Co.												
Hillman,	Luzerne,	44,107	13,644	5,376	63,127	198	236	......	9	4,394	13,360	11
Miners' Mills Coal Mining Co.												
Healey,	Luzerne,	18,939	1,095	630	20,664	260	113	......	1	1,700	1,000	13
Grand totals,		3,765,500	419,302	231,073	4,415,875	......	8,596	46	118	115,360	641,986	1,137

TABLE 2.—Part 2

Names of Operators	County	Number of Boilers					Locomotives			Number of steam engines of all classes	Total horse power	Number of pumps delivering water to surface	Capacity in gallons per minute	Quantity delivered to surface per minute—gallons	Number of electric dynamos	Number of air compressors
		Cylindrical	Horse power	Tubular	Horse power	Total horse power	Steam	Air	Electric							
Lehigh Valley Coal Co.,	Luzerne,	......	....	40	7,975	7,975	15	1	4	144	7,535	16	8,445	5,660	5	9
Lehigh and Wilkes-Barre Coal Co.,		4	130	57	9,302	9,432	5	8	.....	228	17,723	10	10,822	6,773	......	13
Delaware and Hudson Co.,		45	1,215	24	5,000	6,215	2	......	4	129	8,762	10	7,500	3,150	3	3
Red Ash Coal Co.,		......	....	3	900	900	3	......	.....	23	1,327	4	1,430	1,350	......	.....
Wilkes-Barre and Scranton Coal and Iron Co.,		......	....	7	1,050	1,050	......	......	.....	7	558	2	800	400	......	1
Miners' Mills Coal Mining Co.,		1	100	1	150	250	......	......	.....	3	120	....	....	....	......	1
Totals,	....	50	1,445	132	24,377	25,822	25	9	8	534	36,025	42	28,997	17,333	8	27

Table 3.—Number of each class of employes inside and outside of mines

Names of Operators and Collieries	County	Inside											Outside									
		Mine foremen	Assistant mine foremen	Fire bosses and assistants	Miners	Miners' laborers	Drivers and runners	Doorboys and helpers	Pumpmen	Company men	All other employes	Total inside	Superintendents	Foremen	Blacksmiths and carpenters	Engineers and firemen	Slate pickers (boys)	Slate pickers (men)	Bookkeepers and clerks	All other employes	Total outside	Grand total inside and outside
Lehigh Valley Coal Co.																						
Prospect,	Luzerne,	7	21	...	460	290	190	27	15	......	250	1,260	....	2	32	58	32	16	6	236	382	1,642
Dorrance,		4	7	1	190	85	70	21	5	......	134	517	....	1	13	23	10	3	4	100	154	671
Franklin,		2	4	...	124	59	53	7	4	......	87	340	....	1	19	20	16	4	3	80	143	483
		13	32	1	774	434	313	55	24	......	471	2,117	....	4	64	101	58	23	13	416	679	2,796
Washeries:																						
Franklin,	Luzerne,	....	....	...	......	......	......	......	......	......	......	......	....	...	2	3	....	....	....	36	41	41
Henry,		....	....	...	......	......	......	......	......	......	......	......	....	...	...	7	1	....	....	38	46	46
Prospect,		....	....	...	......	......	......	......	......	......	......	......	....	...	...	1	1	....	....	10	12	12
													....	...	2	11	2	....	....	84	99	99
Totals,	....	13	32	1	774	434	313	55	24	......	471	2,117	....	4	66	112	60	23	13	500	778	2,895
Lehigh and Wilkes-Barre Coal Co.																						
Hollenback No. 2,	Luzerne,	2	1	7	207	101	57	23	3	95	......	496	....	1	5	22	32	26	4	80	170	666
South Wilkes-Barre No. 5,		1	2	11	300	246	96	40	2	170	......	868	....	1	9	31	52	14	5	93	205	1,073
Stanton No. 7,		2	1	10	331	171	94	39	5	64	95	812	....	1	7	37	68	14	3	89	219	1,031
Maxwell No. 20,		1	2	9	265	102	38	23	5	50	23	518	....	1	8	29	48	13	4	118	221	739
		6	6	37	1,103	620	285	125	15	379	118	2,694	....	4	29	119	200	67	16	380	815	3,509
Jersey Washery No. 8,	Luzerne,	....	....	...	......	......	......	......	......	......	......	......	....	1	1	2	....	....	....	13	17	17
Totals,	....	6	6	37	1,103	620	285	125	15	379	118	2,694	....	5	30	121	200	67	16	393	832	3,526

Delaware and Hudson Co.																					
Baltimore No. 5,	Luzerne,	1	1	2	......	......	......	......	......	......	......	4	....	1	4	17	....	....	1	16	39	43
Baltimore Tunnel,		2	....	6	194	177	72	2	12	138	25	628	....	1	10	33	52	42	2	111	251	879
Conyngham,		1	1	2	63	55	28	4	3	55	6	218	....	1	6	14	19	24	2	44	110	328
		4	2	10	257	232	100	6	15	193	31	850	....	3	20	64	71	66	5	171	400	1,250
Baltimore Slope Washery,	Luzerne,	....	....	....	......	......	......	......	......	......	......	......	....	1	...	2	4	2	1	20	30	30
Totals,		4	2	10	257	232	100	6	15	193	31	850	....	4	20	66	75	68	6	191	430	1,280
Red Ash Coal Co.																					
Red Ash No. 1,	Luzerne,	1	1	....	60	50	22	3	5	26	......	168	....	4	2	12	....	....	1	79	98	266
Red Ash No. 2,		....	1	....	32	33	20	1	1	23	......	111	1	2	8	5	18	37	1	97	169	280
Totals,		1	2	....	92	83	42	4	6	49	......	279	1	6	10	17	18	37	2	176	267	546
Wilkes-Barre and Scranton Coal and Iron Co.																					
Hillman,	Luzerne,	1	....	2	46	89	10	2	4	5	8	167	1	1	3	9	18	8	1	28	69	236
Miners' Mills Coal Mining Co.																					
Healey,	Luzerne,	1	....	1	30	30	15	2	......	4	......	83	1	1	1	3	13	2	1	8	30	113
Grand totals,		26	42	51	2,302	1,488	765	194	64	630	628	6,190	3	21	130	328	384	205	39	1,296	2,406	8,596

TABLE 3.—Part 2

Names of Operators and Collieries	County	Number of Days Worked in Breaker												
		January	February	March	April	May	June	July	August	September	October	November	December	Total
Lehigh Valley Coal Co.														
Prospect,	Luzerne,	24	20	21	22	19	22	24	22	19	22	21	22	258
Dorrance,		21	18	18	17	17	17	18	18	18	19	18	19	218
Franklin,		24	19	17	19	19	22	22	19	19	24	23	23	250
Lehigh and Wilkes-Barre Coal Co.														
Hollenback No. 2,	Luzerne,	19	19	13	10	15	20	20	17	21	14	18	22	208
South Wilkes-Barre No. 5,		19	21	18	21	21	19	20	17	17	15	23	20	231
Stanton No. 7,		19	20	17	21	21	13	20	18	21	15	24	23	232
Maxwell No. 20,		20	21	18	20	23	19	....	....	....	....	....	8	129
Delaware and Hudson Co.														
Baltimore No. 5,	Luzerne,	18	2	....	....	....	....	....	....	....	....	22	19	61
Baltimore Tunnel,		19	16	17	22	22	21	12	23	23	24	19	17	236
Conyngham,		15	15	14	15	14	11	14	19	13	14	12	12	159
Red Ash Coal Co.														
Red Ash No. 1,	Luzerne,	16	17	16	16	18	16	15	15	16	13	20	19	197
Red Ash No. 2,		16	17	16	16	18	16	15	15	16	13	20	19	197
Wilkes-Barre and Scranton Coal and Iron Co.														
Hillman,	Luzerne,	16	16	18	15	13	16	19	17	14	19	18	17	198
Miners' Mills Coal Mining Co.														
Healey,	Luzerne,	23	20	21	22	24	25	24	25	20	26	23	7	260

TABLE 4.—Fatal accidents inside and outside of mines

Date of accident	Name of Person	Nationality	Occupation	Age	Married or single	Number of widows	Number of orphans	Name of Mine	County	Nature and Cause of Accident in Brief
Jan. 7	George Bayors,	Polish,	Miner,	30	M.	1	....	South Wilkes-Barre,	Luzerne,	Fatally injured by a premature blast while tamping hole.
11	John Molinski,	Russian,	Miner,	30	M.	1	2	Prospect (Oakwood),		Instantly killed. Struck on head by a piece of coal that he was barring down at face of chamber.
14	John Andreski,	Lithuanian,	Miner,	45	M.	1	2	South Wilkes-Barre,		Instantly killed by a fall of fire clay at face of chamber.
22	Ben Seleskie,	Polish,	Laborer,	23	S.	....	....	South Wilkes-Barre,		Instantly killed by fall of parting rock at face of chamber.
Feb. 28	Paul Yakul,	Polish,	Miner,	37	M.	1	4	Red Ash No. 1,		Instantly killed by fall of top rock at face of chamber.
March 8	John Pasheck,	Polish,	Miner,	23	M.	1	1	Stanton No. 7,		Instantly killed by fall of top rock at face of chamber.
April 3	Charles Severoski,	Polish,	Laborer,	38	M.	1	....	Prospect,		Fatally injured by fall of top rock at face of chamber. Died April 4.
6	John Holyza,	Slavonian,	Slate picker	17	S.	....	....	Maxwell No. 20,		Instantly killed by falling into mud screen. Outside.
8	Thomas Philipine,	Italian,	Driver,	20	S.	....	....	Henry,		Instantly killed by being caught between trips on plane.
8	Thomas Munroe,	Irish,	Slope Head-man,	28	M.	1	3	Henry,		Fatally injured by being struck by trip on plane.
9	Louis Davidson,	Lithuanian,	Miner,	34	M.	1	2	Stanton,		Instantly killed by fall of top rock in face of chamber.
11	Michael Selick,	Slavonian,	Miner,	36	M.	1	4	Franklin,		Fatally injured by fall of top rock in chamber
22	Oliver Phoeby,	English,	Miner,	45	M.	1	5	Conyngham,		Fatally injured by fall of bone coal and rock in chamber.
30	John Mechensky,	Polish,	Miner,	32	M.	1	1	Henry,		Instantly killed by premature blast.
30	Frederick Flad,	German,	Miner,	34	S.	....	....	Dorrance,		Was found dead in the mines suffocated by gas.
May 13	Patrick Freil,	Irish,	Miner,	60	M.	1	2	South Wilkes-Barre,		Instantly killed by premature blast.
14	John Andrewkovic,	Hungarian,	Laborer,	26	M.	1	2	Dorrance,		Instantly killed by fall of top rock in face of rock tunnel.
June 5	Anthony Karmage,	Polish,	Miner,	36	M.	1	2	Dorrance,		Fatally injured by fall of middle rock in face of gangway.

TABLE 4.—Continued.

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Number of widows	Number of orphans	Name of Mine	County	Nature and Cause of Accident in Brief
June	6	George Parker, ...	English,.....	Miner, ...	57	M.	1	7	Baltimore No. 5, ...	Luzerne,..	Instantly killed by fall of blacksmith coal in face of chamber.
	17	Steve Stevens, ...	English,.....	Timberman,	58	M.	1	1	South Wilkes-Barre,.		Instantly killed by fall of top rock on gangway road while securing it.
	18	Ambros Bonham, ...	American,...	Carpenter, ..	39	M.	1	1	Baltimore No. 5, ...		Fatally injured by falling off scaffold in breaker. Outside.
Aug.	1	Barney Cabulas, ...	Lithuanian,.	Miner, ...	31	M.	1	3	South Wilkes-Barre,.		Fatally injured by a premature blast while tamping hole.
	7	William Rowland, ...	American,...	Driver, ...	19	S.	....	....	No. 4 Slope, Stanton,		Instantly killed by a runaway car from chamber.
	9	Peter Zavotski, ...	Polish,.......	Driver, ...	20	S.	....	....	Dorrance, ...		Instantly killed between car and door prop while jumping on front end of loaded car on gangway road.
	21	Adam Ziginsky, ...	Polish,.......	Miner, ...	33	M.	1	1	Midvale, ...		Instantly killed by an explosion of dynamite.
	27	John Javarowskie, ...	Polish,.......	Miner, ...	28	M.	1	3	Henry Hillman Slope,		Fatally injured by fall of rider coal in face of chamber.
	29	Elmer Craver, ...	American,...	Slate-man,..	35	M.	1	....	South Wilkes-Barre,.		Instantly killed by fall of top rock while unloading a car of rock in dip chamber.
	29	Joseph Molinskie, ...	Polish,.......	Laborer, ...	23	S.	....	....	Stanton No. 7, ...		Fatally burned by an explosion of gas.
Sept.	12	Michael Drury, ...	American,...	Slopeman, ..	28	M.	1	1	Hollenback, ...		Fatally injured by being caught between car and prop.
	18	John T. Jones, ...	Welsh,.......	Miner, ...	58	M.	1	....	Red Ash No. 2, ...		Fatally injured by piece of rock sliding upon him.
	21	Anthony Malia, ...	Irish,.........	Patcher, ...	19	S.	....	....	South Wilkes-Barre,.		Instantly killed by an explosion of gas.
	21	Tallie Evans, ...	Welsh,.......	Patcher, ...	18	S.	....	....	South Wilkes-Barre,.		Instantly killed by an explosion of gas.
	21	Henry McGuire, ...	Irish,.........	Patcher, ...	19	S.	....	....	South Wilkes-Barre,.		Fatally burned by an explosion of gas.
	21	William Strollis, ...	Polish,.......	Patcher, ...	17	S.	....	....	South Wilkes-Barre,.		Fatally burned by an explosion of gas.
	23	John Zurick, ...	Polish,.......	Miner, ...	30	M.	1	1	Henry Red Ash, ...		Fatally injured by a premature blast.
	24	Michael Zedick, ...	Hungarian,..	Driver, ...	20	S.	....	....	Red Ash No. 1, ...		Fatally injured by falling under loaded car while attempting to jump on head end. Outside.
Oct.	12	Maros George, ...	Polish,.......	Laborer, ...	30	M.	1	2	Franklin Rock Slope,		Instantly killed by fall of top rock in chamber.
	17	Richard Hughes, ...	Welsh,.......	Pulley Man,	55	M.	1	....	No. 4 Slope, Stanton,		Instantly killed by runaway trip on slope.

Oct.	25	Michael Martin, ...	German,.....	Topman, ...	40	M.	1	8	Stanton No. 7, ...	Luzerne,..	Fatally injured by run away trip on breaker plane. Outside.
Nov.	7	Ben Tyeskowsky, ...	Polish,.......	Miner, ...	31	M.	1	....	South Wilkes-Barre,.		Fatally injured by fall of top coal at corner of heading while barring loose coal.
	14	Michael Strocks, ...	Polish,.......	Miner, ...	35	M.	1	3	South Wilkes-Barre,.		Fatally burned by an explosion of gas.
	18	Joseph Subsack, ...	Polish,.......	Driver, ...	20	S.	....	....	South Wilkes-Barre,.		Fatally injured by being caught between cars at foot of slope.
	19	Herbert Lewis, ...	American,...	Timberman,.	35	M.	1	3	Baltimore No. 2, ...		Fatally injured by fall of rider coal in face of airway.
	27	John Matolis, ...	Lithuanian,.	Miner, ...	38	M.	1	5	Stanton No. 7, ...		Fatally burned by an explosion of gas.
Dec.	17	John Shuba, ...	Polish,.......	Miner, ...	42	M.	1	2	Dorrance, ...		Fatally injured by fall of rock at face of gangway while making room for timber.
	17	John Raczrokaitus, ...	Lithuanian,.	Miner, ...	27	S.	....	....	South Wilkes-Barre,.		Fatally injured by premature blast.

TABLE 5.—Non-fatal accidents inside and outside of mines

Date of accident	Name of Person	Nationality	Occupation	Age	Married or single	Name of Mine	County	Nature and Cause of Accident in Brief
Jan. 7	John Mehaski,	Polish,	Laborer,	18	S.	South Wilkes-Barre,,	Luzerne,..	Head and body severely bruised by a blast.
7	Mike Niscon,	Irish,	Runner,	29	M.	Stanton,		Squeezed about the hips. Caught between door frame and cars.
10	Wm. Connell,	Irish,	Bratticeman,	40	M.	Hillman,		Hands and face severely burned by gas.
13	John Casey,	American,	Shaft headman,	29	M.	Stanton,		Bone broken in hand. Caught between car and iron girder. Outside.
14	Joseph Ellman,	German,	Miner,	45	M.	Conyngham,		Leg broken by small piece of rock striking it.
19	William Taber,	Polish,	Laborer,	20	S.	Dorrance,		Hands, face and neck burned by powder.
21	Jacob Grohoski,	Polish,	Laborer,	36	M.	Hillman,		Back injured by fall of rock.
21	R. A. Reed,	American,	Foreman,	40	M.	Stanton,		Small bone in leg broken. Stepped on a piece of coal and leg turned. Outside.
26	Edward Petris,	American,	Runner,	28	S.	Dorrance,		Back squeezed and hip fractured. Caught between car and rib.
26	Frank Bananskie,	Italian,	Loader,	40	S.	Prospect,		Squeezed about the body. Caught between breaker and car. Outside.
26	Shanter Railes,	Hungarian,.	Laborer,	35	M.	Red Ash No. 1,		Back injured by fall of frozen culm off culm bank. Outside.
29	Anthony Saloski,	Polish,	Laborer,	42	S.	Conyngham,		Back injured by small piece of rock falling upon him.
Feb. 1	John T. Lewis,	Welsh,	Timberman,	60	M.	Franklin,		Leg broken by piece of rock striking it.
9	Peter Lyons,	Irish,	Miner,	47	M.	Hillman,		Leg fractured by flying coal from a blast.
9	John Lyons,	American,	Laborer,	27	M.	Hillman,		Neck injured by flying pieces of coal from a blast.
11	Edward Dugan,	American,	Patcher,	18	S.	South Wilkes-Barre,		Two fingers fractured by being caught between two hooks.
11	George Rodack,	Austrian,	Miner,	45	M.	Hillman,		Slightly burned on face and hands by gas.
11	Philip Comiski,	Polish,	Miner,	31	M.	Red Ash No. 1,		Back injured by fall of top rock.
11	John Engle,	Polish,	Laborer,	33	M.	Red Ash No. 1,		Head slightly cut by fall of top coal.
11	George Zaleta,	Polish,	Laborer,	47	M.	Red Ash No. 1,		Ankle bruised by fall of top rock.
12	Frank Savitski,	Polish,	Miner,	39	M.	South Wilkes-Barre,		Foot bruised by being caught in shaft cage.
19	Leonard Payne,	English,	Laborer,	25	S.	Stanton,		Back bruised by fall of rock off the rib.

Feb.	20	Patrick Cusick,	American,	Driver,	22	S.	Maxwell,	Luzerne,	Tip of right thumb cut off between spreader hook and car.
	22	Peter Drasko,	Polish,	Miner,	38	M.	South Wilkes-Barre,		Head and body cut by premature blast.
	23	Louis Aneskavage,	Polish,	Laborer,	40	S.	Dorrance,		Foot bruised by fall of rider coal.
	23	John Mayack,	Slavonian,	Miner,	33	M.	Prospect,		Hands and face severely burned by gas.
	23	John Prostski,	Slavonian,	Laborer,	38	M.			
	26	Fred Nicholas,	American,	Driver,	21	S.	Hillman,		Leg fractured by being caught between car and door post.
March	6	Albin Marconi,	Italian,	Driver,	17	S.	Franklin,		Left arm broken by being caught between cars.
	6	George Rusher,	Russian,	Laborer,	35	M.	Hollenback,		Shoulder squeezed. Caught between cars. Outside.
	7	Metro Blitz,	Slavonian,	Doorboy,	16	S.	Prospect,		Concussion of the brain by being thrown off car against the rib.
	11	Frank Moyles,	American,	Brakeman,	31	S.	Red Ash No. 1,		Squeezed about the body. Fell from a trip under locomotive.
	12	Enoch Morgans,	Welsh,	Runner,	29	M.	Prospect,		Nose fractured and face lacerated by being kicked by a mule.
	15	Charles Deitrick,	American,	Headman,	28	S.	Hollenback,		Right arm fractured by falling off a car while unloading hay. Outside.
	21	Thomas Vilga,	Polish,	Miner,	40	M.	South Wilkes-Barre,		Head and legs severely cut by premature blast.
	22	Edward Leslie,	American,	Driver,	18	S.	Stanton,		Leg bruised. Caught under a trip of cars.
	23	Thomas Gaughan,	Irish,	Laborer,	22	S.	Maxwell,		Instep bruised and toes broken by overturned ash car. Outside.
	25	John Doubuiski,	Polish,	Miner,	35	M.	Franklin,		Left arm broken by piece of rock falling from the roof.
	25	Stanley Pospitus,	Russian,	Miner,	42	M.	Henry Hillman Slope,		Hands, arms and face severely burned by explosion of black powder.
	25	Victor Adams,	Slavonian,	Driver,	22	S.	Midvale (Prospect),		Shoulder dislocated and arm fractured by falling under car.
	27	Gordon Thomas,	American,	Patcher,	18	S.	South Wilkes-Barre,		Squeezed about the shoulder. Caught between car and prop.
	27	John Boyle,	American,	Driver,	17	S.	Baltimore No. 2,		Two middle fingers on left hand crushed. Caught between sprag and rail.
April	4	Jacob Pythlick,	Austrian,	Miner,	28	S.	Hollenback,		Hands and face severely cut by premature blast.
	8	John Starr,	Polish,	Laborer,	31	M.	Stanton,		Squeezed about chest and shoulder blade broken by being caught between cars. Outside.
	9	George Synjack,	Slavonian,	Doorboy,	17	S.	Wyoming,		Left leg broken by being caught between loaded cars.
	11	Joseph Hopkins,	Welsh,	Track layer,	27	M.	South Wilkes-Barre,		Leg and arm fractured and chest bruised by runaway trip.
	17	John Duggey,	Slavonian,	Laborer,	38	M.	Franklin,		Chest and stomach squeezed. Caught between car and building. Outside.
	19	William Jennis,	Polish,	Laborer,	26	S.	Prospect,		Shoulder blade fractured by premature blast.
	20	Stanley Domininski,	Polish,	Laborer,	24	S.	Maxwell,		Hands and face burned by explosion of powder.
	25	Thomas Lloydd,	American,	Doorboy,	17	S.	Maxwell,		Leg fractured and scalp wounded by falling off a trip of cars.
	26	Andrew Serosky,	Slavonian,	Laborer,	34	M.	Henry,		Hands and face severely burned by an explosion of gas.
	26	Thomas Finish,	Polish,	Laborer,	50	S.			

TABLE 5.—Continued

Date of accident	Name of Person	Occupation	Nationality	Age	Married or single	Name of Mine	County	Nature and Cause of Accident in Brief
April 30	Edward Beach,	Welsh,	Tracklayer,	30	M.	South Wilkes-Barre,	Luzerne,	Ribs fractured and body bruised by being dragged by a mule.
30	Simon Bendervoick,	Lithuanian,	Driver,	19	S.	Prospect,		Leg fractured. Caught between car and prop.
May 1	John Linker,	American,	Driver,	19	S.	Baltimore No. 2,		Squeezed across small of back and kidney by being caught between cars.
4	Thomas J. Davies,	American,	Laborer,	24	M.	Baltimore Tunnel,		Leg broken by a piece of coal striking it.
6	Frank Borosky,	Polish,	Laborer,	29	M.	Maxwell,		Wrist fractured by a car running over it.
7	Andrew Shamonitas,	Polish,	Laborer,	23	S.	Dorrance,		Left leg broken by a piece of rider coal falling on it.
11	Joseph Miller,	Slavonian,	Miner,	46	M.	Red Ash No. 2,		Right leg broken by a piece of top rock falling on it.
11	Andrew Cosgrove,	Russian,	Driver,	18	S.	Dorrance,		Pelvis broken by being caught between car and rib.
16	Roy Evans,	American,	Patcher,	17	S.	South Wilkes-Barre,		Foot severely bruised by being caught between slate.
16	Wallie Shekoskie,	Polish,	Miner,	40	M.	Henry Red Ash,		Right hip dislocated by fall of top slate.
18	Joseph Smith,	Russian,	Laborer,	22	S.	Stanton,		Back and hip bruised by being struck by a trip of cars.
25	George Williams,	English,	Bratticeman,	46	M.	Hollenback,		Right forearm fractured. Caught between truck and roof.
28	Nehmiah Lane,	Welsh,	Driver,	22	S.	Hollenback,		Arm and hips squeezed between cars and timber.
31	Gory Morris,	American,	Runner,	25	M.	South Wilkes-Barre,		Squeezed around chest and body. Caught between car and rib.
June 17	Griffith Williams,	Welsh,	Timberman,	50	M.	South Wilkes-Barre,		Arm fractured by fall of top rock. Arm had to be amputated.
17	Owen Griffiths,	Welsh,	Helper,	28	S.			Head severely cut and legs bruised by fall of top rock.
17	William L. Morgans,	Welsh,	Fire boss,	32	M.			Head and arms severely bruised by fall of top rock.
17	Thomas Healey,	American,	Machinist,	30	S.	Hollenback,		Right arm badly crushed above elbow. Caught in balance wheel. Outside.
July 8	Frank Deroski,	Polish,	Driver,	18	S.	Prospect,		Skull fractured by being kicked on the head by mule.

July	18	Louis Gustitus,	Russian,	Miner,	25	S.	Stanton,	Luzerne,	Head bruised by premature blast.
	20	Victor Warkoviez,	Polish,	Laborer,	29	S.	Henry,		Left leg broken by piece of rock falling from the roof on it.
	20	Henry Williams,	Welsh,	Runner,	23	M.	Stanton,		Knee badly bruised. Caught between two empty cars.
	20	Simon Benderavage,	Polish,	Driver,	19	S.	Midvale,		Right leg fractured by runaway car.
	23	Samuel Henwood,	English,	Carpenter,	59	M.	Prospect,		Arm cut off. Run over by a railroad car. Outside.
	25	Andrew Magda,	Slavonian,	Miner,	30	M.	Prospect,		Arms and hands seriously burned by an explosion of gas.
	26	Eliga Vandermark,	American,	Slatepicker,	14½	S.	Jersey,		Toes cut off by being caught under piston rod of jig.
	26	John Prevest,	Polish,	Driver,	20	S.	Dorrance,		Right arm broken at wrist. Caught between mule and car.
	29	Anthony Yancoski,	Polish,	Laborer,	26	M.	Baltimore Tunnel,		Compound fracture of left leg; dislocation of right ankle, and laceration of right shoulder and arms, by fall of coal.
	29	Anthony Johinan,	Italian,	Miner,	23	M.	Midvale,		Hands and face burned and cut by premature blast.
	30	John Galvin,	American,	Shaftman,	52	M.	Dorrance,		Rib fractured and badly bruised by a falling scaffold.
Aug.	5	Michael Schinski,	German,	Driver,	18	S.	Baltimore Tunnel,		Left leg fractured; face and back cut by falling under a car.
	5	Donwick Pollock,	Polish,	Laborer,	25	M.	Franklin,		Skull fractured by flying pieces of coal from blast.
	9	William Pritchard,	American,	Runner,	19	S.	Dorrance,		Left arm broken at elbow by falling over a piece of coal.
	10	Walter Coolick,	Polish,	Miner,	27	M.	South Wilkes-Barre,		Toes fractured by being caught between cage and bunting.
	14	James Brennan,	Irish,	Driver boss,	34	M.	Conyngham,		Ankle fractured by being struck by haulage rope.
	26	Joseph Lisnefski,	Polish,	Miner,	25	M.	Hillman,		Legs fractured by fall of top rock.
	26	Frank Monahan,	American,	Car inspector,	18	S.	Henry,		Hip seriously injured by being caught between cars. Outside.
	28	Patrick Burke,	American,	Topman,	22	S.	Stanton,		Knee crushed between cars while uncoupling them. Outside.
	29	James McManaman,	Irish,	Miner,	48	M.	Stanton,		Face, hands and body burned by an explosion of gas.
	29	Patrick Heeney,	Irish,	Laborer,	22	S.			
Sept.	7	Fred Reice,	American,	Fireman,	32	M.	South Wilkes-Barre,		Ribs fractured by falling off the side wall of boiler house.
	11	Frank Adamontus,	Polish,	Miner,	31	M.	Stanton,		Hips bruised by piece of top rock falling on him.
	16	John Robez,	Russian,	Road cleaner,	30	M.	Prospect,		Two fingers crushed by piece of rib coal falling on him.
	17	Andrew Weazel,	Slavonian,	Motor helper,	23	S.	Dorrance,		Finger cut off while blocking trip of cars.
	19	Jacob Hopper,	American,	Miner,	42	M.	Hillman Vein,		Leg fractured by a piece of coal from a blast.
	20	Ben Shivitski,	Polish,	Laborer,	21	S.	Healey,		Shoulder dislocated and hip fractured. Caught between car and roof.
	21	James Cooney,	Irish,	Driver,	20	S.	South Wilkes-Barre,		Severely burned by an explosion of gas.
	23	Wendal Strake,	Polish,	Laborer,	28	M.	Henry Red Ash,		Scalp severely wounded by premature blast.

TABLE 5.—Continued

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Name of Mine	County	Nature and Cause of Accident in Brief
Oct.	1	Abe George,	Syrian,	Loader,	25	S.	South Wilkes-Barre,	Luzerne,	Abdomen bruised and right lung injured. He was struck by bumping stick between cars.
	10	Thomas Choppel,	American,	Asst. timberman,	26	M.	Baltimore No. 2,		Left arm broken above elbow by striking against rib.
	12	Patrick Gallagher,	American,	Driver,	22	S.	Baltimore No. 2,		Right hip dislocated by jumping off a trip and falling under it.
	12	Hugh Jones,	Welsh,	Runner,	21	S.	Franklin,		Head, back and foot seriously injured by fall of top rock.
	16	Stanley Smith,	Polish,	Slatepicker,	16	S.	Baltimore Tunnel,		Right arm fractured, shoulder dislocated and left arm fractured. His clothes caught in shaft of jigs. Outside.
	19	Mike Yancoski,	Polish,	Miner,	28	M.	Hillman,		Ankle broken and dislocated by fall of top rock.
	24	George Brooks,*	Polish,	Laborer,	26	S.	Inman No. 21,		Jaw broken and body bruised by falling off scaffold.
Nov.	4	Anthony Blaskowski,	Lithuanian,	Miner,	38	M.	Conyngham,		Leg crushed. Run over by loaded car.
	9	Thomas Lydzienski,	Polish,	Miner,	35	S.	Prospect,		Face and hands burned by powder.
	12	John Starey,	Austrian,	Laborer,	40	M.	Baltimore No. 5,		Face and hands burned by an explosion of gas.
	18	Andrew Guto,	Slavonian,	Laborer,	32	M.	Maxwell No. 20,		One finger severed by being caught under a piece of angle iron on window sill. Outside.
	19	Tony Fakoskey,	Polish,	Laborer,	20	S.	South Wilkes-Barre,		Thumb fractured. Caught between block and car wheel.
	25	George Lawrence,	Polish,	Laborer,	20	S.	Red Ash No. 1,		Hips squeezed. Caught between car and props.
	25	August Marowinski,	Lithuanian,	Miner,	23	S.	South Wilkes-Barre,		Hands and face severely burned by an explosion of gas.
	26	Festus Mullen,	Irish,	Miner,	48	M.	Empire,		Leg fractured by fall of top coal.
	27	John Matus,	Lithuanian,	Laborer,	25	S.	Stanton,		Hands and face burned by an explosion of gas.

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*Not reported in Table 2, as Inman No. 21 Colliery had no production.

Nov.	29	Mike Croppshaw, ...	Slavonian,...	Driver, ...	17	S.	Prospect, ...	Luzerne,..	Hip dislocated. Caught between car and door prop.
Dec.	12	Anthony Oshanto, ...	Polish,.......	Laborer, ...	22	S.	Baltimore Tunnel, ...		Arm cut off by a piece of top rock falling on him.
	21	Michael Lynch, ...	Slavonian,...	Miner, ...	39	M.	Baltimore No. 5, ...		Index finger cut off while spragging a car. Caught between sprag and bottom rock.

FATAL ACCIDENTS

Cars

April 8, Henry Shaft, Prospect Colliery, Thomas Pilipine, Italian, driver, was instantly killed between empty and loaded cars on gravity plane, and Thomas Monroe, Irish, slope headman, was fatally injured. Pilipine and Monroe had descended to the foot of the plane to assist the foot tender in replacing on the track two empty cars that had been derailed. After they had put the cars on the track the foot tender gave the signal to hoist, and Pilipine and Monroe jumped on the trip. The foot tender stopped the trip and told the men to walk up the manway, but they insisted on riding up the plane. When half way up, the trip collided with a loaded trip coming down. The rope on the empty trip broke and the empty trip went down the plane with Monroe in one of the cars. When the cars arrived at the bottom they were demolished and Monroe was found among the debris. Pilipine was found on the plane where the two trips met. He had been riding on the head end of the first car. Monroe died April 10.

August 7, No. 4 Slope, Stanton Colliery, William Rowland, American, driver, was instantly killed by a runaway car from face of chamber. The miner let the car down without any sprags and when it came to a curve in the road, it was derailed and turned over on Rowland who was standing along the side of the road.

Premature Blasts

April 30, Henry Shaft, Prospect Colliery, John Machensky, Polish, miner, was fatally injured by a flying piece of coal from a blast. He had retired to a place of safety and waited there for some time. Thinking the shot had missed fire he started back towards the face, and when within a few feet of it the shot exploded. He died on the way home.

May 13, South Wilkes-Barre Colliery, Patrick Freil, Irish, miner, was fatally injured by a premature blast while trying to explode a stick of dynamite on a loose piece of rock that he wanted to break. He had failed to set the blast off with the battery, and it appeared that he tried to explode it by placing a squib in an exploder and in some unknown manner it went off before he could get away. He died on his way home.

August 1, South Wilkes-Barre Colliery, Barney Cabulas, Lithuanian, miner, was fatally injured by a premature blast of dynamite while tamping a hole with an iron scraper instead of a wooden rod, which was contrary to law.

September 23, Henry Red Ash Shaft, John Zurick, Polish, miner, was fatally injured by a premature blast while assisting another miner to fire a blast. After several unsuccessful attempts had been made to explode it, due to a small feeder of gas that was issuing from the hole, Eade, the miner, told Zurick to wait until he could borrow a straight needle from another miner. During Eade's absence Zurick and Eade's laborer undertook to fire the blast, and before either of them could get away to a place of safety they were caught by the flying pieces of coal. Zurick died the same day.

Explosion of Dynamite

August 21, Midvale Slope, Prospect Colliery, Adam Ziginsky, Polish, miner, was instantly killed by setting off a quantity of dynamite in his chamber while making a charge for a blast. In some unknown manner, as he was alone at the time, the dynamite exploded.

Explosions of Gas

August 29, Stanton Colliery, Joseph Molinskie, Polish, laborer, was fatally injured by an explosion of gas. He was laboring in a counter gangway at the time of the accident. The miner fired a blast in a heading that tapped a chamber in the abandoned workings. The cross shift miner had warned them to use nothing but safety lamps until he could get a hole through. The blast went off and knocked the canvas down that was bringing air into the heading. The miner ordered Molinskie to replace the canvas and while doing this he ignited a small body of gas that came with the current from the old chamber. He died September 8.

September 21, South Wilkes-Barre Colliery, an explosion of gas occurred in which Anthony Malia, Irish, patcher, and Tallie Evans, Welsh, patcher, were instantly killed, and Henry McGuire, Irish, patcher, and William Strollis, Polish, patcher, were fatally injured. Strollis died September 22; McGuire died September 25. The accident occurred at 7.45 A. M. while the men were on their way to work. The fire-boss after making his examination of this particular section in the morning reported it as being free from gas. This was about 5.45 A. M. and was the last place he examined on his way back to the Fire-bosses Station.

At the inquest held at Wilkes-Barre it appeared from the testimony given by George Okitus, miner, who with other working men had passed by this place previous to the explosion, that about 6.30 A. M., on their way to No. 8 Slope, they had found a check door in the pillar blocked open which allowed the gas to accumulate in two chambers up about 80 feet from the gangway road.

They passed by and left the door open, when they knew it should be shut, as some of them had been passing through this gangway to No. 8 Slope for six years. From testimony of George Benning, a slope footman, and Martin Malia, brother of one of the victims, they passed through this door about 7.30 and found it blocked open. They removed the block and closed the door and walked into No. 8 Slope.

It appears that when those men shut the door, putting the ventilation in circulation in those two chambers it started the gas down the inside chamber and it returned to the same gangway inside of the door. When the men arrived at this point about 7.40 with their naked lights they ignited the gas, causing the explosion. The inquest was postponed until the jury could visit the scene of the accident, which they did the next day and gave the following verdict:

"Anthony Malia and others came to their death on the 21st day of September, 1907, at No. 3 Slope, South Wilkes-Barre, Lehigh and Wilkes-Barre Coal Company, from injuries received from an explosion of gas.

The evidence shows that some person or persons, unknown to the jury, while on their way to work carelessly or otherwise left a check door open in the gangway which allowed the gas to accumulate at that point.

The evidence also shows that a miner by the name of George Okitus, with other workingmen, passed through this door and finding it open failed to report the same or shut it.

We find that this action on their part was gross negligence. We find too that this particular place was a dangerous one and that some one should have been placed there to see that the door was kept closed.

D. W. DODSON, (Coroner)
FRANK BLAZEJAWSKI,
H. H. HUGHES,
WM. S. MORRIS,
EVAN L. JONES,
JAMES HIECOX,
JOHN KELLY,
Jurors."

November 14, South Wilkes-Barre Colliery, Michael Strocks, Polish, miner, was fatally injured by an explosion of gas. The runner ran his loaded car down from the face, and on the way down from the chamber the car jumped the track and ran into the door frame which prevented the door from shutting. The miner and laborer unloaded the car and placed the car on the track again. When the runner came in, he ran the car away from the door and instructed the miner to close it and to take his safety lamp and examine the face and to go behind the brattice with the intake air. The miner disobeyed his orders, closed the door and walked up the roadway against the current with his naked light on his head. When only a short distance above the door he ignited a small body of gas that had accumulated while the door was open.

November 27, Stanton Colliery, John Matolis, Lithuanian, miner, was fatally injured by an explosion of gas in his chamber. It was reported free from gas in the morning by the fire boss, and between the time the fire boss had been in this place and the time the miner arrived in his chamber a fall of rock occurred breaking the brattice near the gangway road. The miner deliberately walked over the cave-in with his naked lamp and ignited a small quantity of gas that had accumulated in the face after the brattice was broken. He should have examined his place with a safety lamp.

Suffocation by Gas

April 30, Dorrance Colliery, Frederick Flad, German, miner, was found dead in the mines by the fire boss while making his examinations in the morning, about 5.30 A. M., May 1. An inquest was held and the following verdict was rendered:

"That the said Fred Flad came to his death from suffocation or asphyxiation either by gas or after damp. The deceased was found dead in his chamber on the morning of May 1. He was last seen alive at 2.20 P. M. working in his chamber. The fire boss reported 16 inches of gas at the roof in the chamber of the deceased the morning of April 30 and testified that he had instructed the bratticeman to place the brattice in such a position as to force a greater current of air into the place.

The jury met May 4, heard the testimony of several witnesses and adjourned at the directions of the mine inspector, in order to procure the night watchman, engineer and other witnesses.

The mine inspector suggested that a post mortem examination be held. The post mortem was held and the physician's testimony at the inquest showed that the man had no doubt died of asphyxiation.

W. S. CASTERLINE, Deputy Coroner.
C. L. KINGSLEY,
D. J. SMITH,
J. P. LORD,
WM. BAUR,
ALVIN HOMES,
Jurors."

Machinery, (Outside)

April 6, Maxwell Colliery, John Holyza, Slavonian, slatepicker, was instantly killed by falling into a mud screen. Holyza was playing with some other boys while the breaker was waiting for coal. When they started to prepare coal he ran around the back way by the mud screen. When the machinery was stopped he was found dead under the west side of the mud screen.

Miscellaneous, (Outside)

June 18, Baltimore No. 5, Delaware and Hudson Coal Company, Ambros Bonham, American, boss carpenter, was fatally injured by falling off scaffold. While he and others were taking a piece of machinery over the scaffold, the plank on which he was standing broke and he fell a distance of about fifty feet. He died shortly afterwards.

CONDITION OF COLLIERIES

LEHIGH VALLEY COAL COMPANY

Prospect Colliery.—Ventilation good, roads and drainage fair, condition as to safety good.

Dorrance Colliery.—Ventilation good, roads and drainage fair, condition as to safety good.

Franklin Colliery.—Ventilation fair, roads and drainage fair, condition as to safety good.

LEHIGH AND WILKES-BARRE COAL COMPANY

Hollenback No. 2 Colliery.—Ventilation good, roads and drainage good, condition as to safety good.

South Wilkes-Barre No. 5 Colliery.—Ventilation good, roads and drainage good, condition as to safety good.

Stanton No. 7 Colliery.—Ventilation good, roads and drainage good, condition as to safety good.

Maxwell No. 20 Colliery.—Ventilation good, roads and drainage good, condition as to safety good.

DELAWARE AND HUDSON COMPANY

Baltimore No. 5.—Ventilation good, roads and drainage good, condition as to safety good.

Baltimore Tunnel.—Ventilation fair, roads and drainage good, condition as to safety good.

Conyngham Colliery.—Ventilation good, roads and drainage good, condition as to safety good.

RED ASH COAL COMPANY

Red Ash Nos. 1 and 2.—Ventilation fair, roads and drainage fair, condition as to safety fair.

WILKES-BARRE AND SCRANTON COAL AND IRON COMPANY

Hillman Colliery.—Ventilation good, roads and drainage good, condition as to safety good.

MINERS' MILLS COAL MINING COMPANY

Healey Colliery.—Ventilation fair, roads and drainage fair, condition as to safety good.

IMPROVEMENTS

LEHIGH VALLEY COAL COMPANY

Henry Mine.—No. 28 Slope, Red Ash vein was graded through rock. Gravity plane driven in south workings. A new steel overcast is under construction in the south workings. A new concrete hospital near the foot of shaft completed.

Considerable work was done in securing foot of shafts, such as retimbering, etc.

Engines from Merritt slope moved to Skidmore slope and coal hoisted from Skidmore landing.

Considerable rock grading was done in the lower Baltimore workings.

Two tunnels were driven through fault in No. 8 Slope in Wyoming 5 Foot vein.

Considerable testing was done on the inside by means of diamond drill holes to prove Red Ash vein. Holes were also driven to tap Enterprise 5 Foot and Hillman workings.

No. 6 Plane Lower Baltimore to 5 Foot equipped and is now in operation.

A tunnel was driven through rock fault in No. 2 Level.

Haulage road from No. 6 Plane to main slope under construction.

New 14x16 concrete steel overcast was put in Henry 5 Foot vein, shaft level. New guides and buntons were put in Henry shaft. New 8 inch steam line from boiler house to 5′ fan and to Henry shaft.

Outside barn remodeled to Lehigh Valley Standard; concrete floor and mangers. New 18x30 mule hospital.

Enterprise bank west of Plank road exhausted and Henry bank being reclaimed.

Preparations are under way to reclaim old Prospect bank. This is to be taken to Henry Washery by means of locomotive.

Prospect Colliery.—Stables for 75 mules in Red Ash completed. New electric hoist in operation on new slope west workings.

No. 10 Slope regraded through fault. A new concrete steel overcast has been put in this vein over No. 10 Slope. Second opening for Rock slope, Skidmore workings.

New mule stable in Midvale Hillman slope. New 500-ton washery completed and in operation.

Extensive repairs have been made to breaker and jig foundation.

Colliery office remodeled and new loaded scales installed.

Dorrance Colliery.—Red Ash tunnel and plane completed. Second opening to No. 6 Extension Tunnel completed. 5 concrete steel overcasts in Baltimore vein completed. 1 Undercast and direct return at head of Slant slope completed.

Vein connection made through Mill Creek anticlinal from No. 18 Tunnel Upper Baltimore to Plank road, Upper Baltimore workings.

2-10 ton electric locomotives installed in Hillman vein.

New slope is being driven in Hillman to connect with No. 15 and No. 17 tunnels from 5 Foot vein.

Extension was made to new Hillman vein stable.

Outside

New 350 K. W. 250 volt generator installed. Work is now being done on new 25x14 upcast shaft, from surface to Baltimore vein.

Franklin Colliery.—Central pumping plant in Red Ash vein completed. No. 8 Plane equipped with engine, steam from surface through bore hole. Nos. 23 and 24 tunnels Top Red Ash to Bottom Red Ash. No. 9 Slope district completed.

10 inch Water line from Column bore hole to reservoir completed. New steam line from boiler house to Red Ash Central pumping plant completed.

LEHIGH AND WILKES-BARRE COAL COMPANY

Hollenback No. 2 Colliery, Inside.—No. 18 Tunnel extended to Ross.

No. 19 Tunnel extended to Ross.

Rock Plane airway Stanton to Hillman.

No. 5 Slope graded through rock.

South Wilkes-Barre No. 5 Colliery, Inside.—No. 7 Slope extended from Abbott to Hillman. Pumping plant No. 2 Slope.

Stanton No. 7 Colliery, Outside.—Slush hole, Surface to Hillman. Slush hole, Surface to Stanton.

Inside.—Mule barn Red Ash Shaft Level. Pumping plant No. 4 Shaft Level.

Maxwell No. 20 Colliery, Outside.—Breaker remodeled. Timber saw mill. 500 H. P. water tube boilers. Engines and rope holes for Nos. 8 and 10 Slopes.

Inside.—Rock Plane airway Kidney to Abbott.

No. 19 Tunnel extended to Abbott.

Inman No. 21 Colliery.—Sinking Baltimore and Red Ash shafts.

DELAWARE AND HUDSON COMPANY

Baltimore Slope.—Washery completed and in operation.

Baltimore No. 5.—New breaker erected to take place of one destroyed by fire, February 7, 1907, breaker now in operation.

An 8x6 bore hole driven from surface to Red Ash vein, 950 feet for the conveyance of electric wires.

Baltimore No. 2.—No. 9 Slope Red Ash vein, driven 200 feet and completed.

No. 10 Slope Ross vein opened and driven 600 feet.

No. 11 Slope Ross vein opened and driven 600 feet.

Baltimore Tunnel.—No. 6 Slope, Red Ash vein extended 600 feet. Top split Red Ash vein opened on 5th and 6th.

East.—No. 6 Slope, Bottom Red Ash vein.

Conyngham.—No. 11 plane, Abbott vein, driven 50 feet and completed a 10″ bore hole from Baltimore to Red Ash vein, driven 348 feet for water.

WILKES-BARRE AND SCRANTON COAL AND IRON COMPANY

Hillman Mine.—The slope in Stanton vein was extended 579 feet. The Slope airway Stanton was extended 579 feet.

Mine Foremen's Examinations

The examination of applicants for certificates of qualification as Mine Foremen and Assistant Mine Foremen was held on the 14th and 15th of May, at the Y. M. C. A. Building, Wilkes-Barre.

The Board of Examiners was Thomas H. Price, Inspector of Mines; F. H. Kohlbraker, superintendent; Thomas D. Lloyd and Patrick McGrane, miners. The following applicants were recommended for certificates:

Mine Foremen

Andrew Peterson, William Owens, Wilkes-Barre; Alfred B. Taylor, John C. Hermansen, Alden Station; Patrick Shovlin, Plymouth.

Assistant Mine Foremen

Henry Lewis, Morgan P. Harrison, Lewis R. Thomas, William D. Thomas, Plymouth; John R. Owens, Westmoor; Edward W. Davis, Wilkes-Barre; David Lloyd, Plymouth; Benjamin G. Griffiths, Sugar Notch; David H. Walters, James B. Flammery, Nanticoke; William L. Richards, D. J. Edwards, Edwardsville; Daniel Davis, Kingston; James Bryan, Alden Station; Thomas Price, Peely.

Eighth District

LUZERNE COUNTY

Kingston, Pa., March 3, 1908.

Hon. James E. Roderick, Chief of Department of Mines:

Sir: I have the honor to transmit herewith my annual report as Inspector of Mines for the Eighth Anthracite District for the year ending December 31, 1907.

The report contains the usual tables and statistics, with a brief description of the most important improvements made at the collieries and also a brief description of fatal accidents.

Respectfully submitted,

P. M. BOYLE,

Inspector.

SUMMARY OF STATISTICS

Number of collieries,	16
Number of mines,	27
Number of mines in operation,	27
Number of tons of coal shipped to market,	3,648,099
Number of tons used at mines for steam and heat,	388,236
Number of tons sold to local trade and used by employes,	108,986
Number of tons produced,	4,145,321
Number of tons produced by compressed air machines,	
Number of tons produced by electrical machines,	
Number of persons employed inside of mines,	6,692
Number of persons empoyed outside,	2,357
Number of fatal accidents inside of mines,	33
Number of fatal accidents outside,	4
Number of non-fatal accidents inside of mines,	122
Number of non-fatal accidents outside,	15
Number of tons of coal produced per fatal accident inside,	125,616
Number of persons employed per fatal accident inside,	203
Number of persons employed per fatal accident outside,	589
Number of persons employed per non-fatal accident inside,	55
Number of persons employed per non-fatal accident outside,	157
Number of wives made widows,	17
Number of children orphaned,	43
Number of steam locomotives used inside of mines,	2
Number of steam locomotives used outside,	11
Number of compressed air locomotives used inside,	3
Number of electric motors used inside,	17
Number of fans in use,	28
Number of gaseous mines in operation,	19
Number of non-gaseous mines in operation,	8
Number of new mines opened,	1

TABLE A

PRODUCTION OF COAL

Names of Operators	Tons
Kingston Coal Company,	1,372,646
Temple Iron Company,	940,810
Lehigh Valley Coal Company,	885,773
Clear Spring Coal Company,	273,216
Stevens Coal Company,	167,928
Peoples' Bank of Wilkes-Barre, Receiver,	159,764
Raub Coal Company,	115,065
East Boston Coal Company,	111,471
Delaware, Lackawanna and Western Railroad Company,	80,207
Troy Coal Company,	30,948
Dunn Coal Company,	7,493
Total,	4,145,321

Production by Counties

Luzerne,	4,145,321

TABLE B.—Fatal and non-fatal accidents inside and outside of mines; number of tons of coal produced per accident; number of persons employed; number employed per accident

Names of Operators	Fatal Accidents			Non-fatal Accidents			Tons of coal produced per fatal accident inside	Tons of coal produced per non-fatal accident inside	Number of employes inside	Number of employes outside	Total number of employes	Number of employes inside per fatal accident	Number of employes outside per fatal accident	Number of employes inside per non-fatal accident	Number of employes outside per non-fatal accident
	Inside	Outside	Total	Inside	Outside	Total									
Kingston Coal Co.,	7	1	8	53	4	57	196,092	25,899	1,822	645	2,467	260	645	34	161
Temple Iron Co.,	14	1	15	28	1	29	67,201	33,600	1,981	461	2,442	141	461	71	461
Lehigh Valley Coal Co.,	4	2	6	22	6	28	221,443	40,262	1,180	430	1,610	295	215	54	72
Clear Spring Coal Co.,	1	....	1	....	1	1	273,216	....	525	182	707	525	....	....	182
Stevens Coal Co.,	....	....	....	4	1	5	....	41,982	237	113	350	....	....	59	113
Peoples' Bank of Wilkes-Barre, Receiver,	1	....	1	5	....	5	159,764	31,953	249	114	363	249	....	50	....
Raub Coal Co.,	3	....	3	3	1	4	38,355	38,355	260	153	413	87	....	87	153
East Boston Coal Co.,	....	....	....	6	....	6	....	18,578	227	133	360	....	....	38	....
Delaware, Lackawanna and Western Railroad Co.	2	....	2	1	1	2	40,103	80,207	129	76	205	65	....	129	76
Troy Coal Co.,	1	....	1	....	....	....	30,948	....	62	37	99	62	....	....	....
Miscellaneous companies,	....	....	....	....	....	....	....	....	20	13	33	....	....	....	....
Totals and averages for district,	33	4	37	122	15	137	125,616	33,978	6,692	2,357	9,049	203	589	55	157

TABLE C.—Classification of Fatal Accidents Inside and Outside of Mines

	Months													
	January	February	March	April	May	June	July	August	September	October	November	December	Totals	Percentages
Causes of Accidents Inside														
Falls of coal,	....	....	1	....	....	....	....	...	....	....	1	....	2	6.06
Falls of slate,	....	....	....	....	....	....	....	1	....	....	....	....	1	3.03
Falls of roof,	1	1	1	1	....	1	1	3	1	1	3	1	15	45.46
Mine cars,	1	....	....	....	....	....	....	...	1	....	1	....	3	9.09
Explosions of gas and dust,	....	....	....	1	....	....	....	...	....	....	1	....	2	6.06
Explosions of powder and dynamite,	1	....	....	....	....	....	....	...	....	....	....	....	1	3.03
Premature blasts,	....	1	....	....	....	....	1	...	....	....	1	....	3	9.09
Falling into shafts,	1	....	1	....	....	1	....	...	....	....	....	....	3	9.09
Electricity,	....	....	....	....	....	....	....	...	....	....	....	1	1	3.03
Miscellaneous,	1	....	....	....	1	....	....	...	....	....	....	....	2	6.06
Totals,	5	2	3	2	1	2	2	4	2	1	7	2	33	100.00
Causes of Accidents Outside														
Cars,	....	....	....	1	....	1	....	...	1	....	....	....	3	75.00
Miscellaneous,	....	....	....	....	....	....	....	...	1	....	....	....	1	25.00
Totals,	....	....	....	1	....	1	....	...	2	....	....	....	4	100.00
Grand totals inside and outside,	5	2	3	3	1	3	2	4	4	1	7	2	37	

TABLE D.—Classification of Non-fatal Accidents Inside and Outside of Mines

	Months													
	January	February	March	April	May	June	July	August	September	October	November	December	Totals	Percentages
Causes of Accidents Inside														
Falls of coal,	....	....	1	....	1	1	1	1	2	1	2	1	11	9.02
Falls of slate,	1	2	....	....	....	....	1	....	2	1	....	....	7	5.74
Falls of roof,	1	2	....	1	2	5	1	2	3	....	5	....	22	18.03
Mine cars,	....	....	3	7	1	....	1	5	2	2	3	3	27	22.13
Explosions of gas and dust,	1	2	1	2	2	4	2	1	1	3	1	1	21	17.21
Explosions of powder and dynamite,	1	....	....	....	....	....	....	...	1	....	1	....	3	2.46
Premature blasts,	....	....	1	....	4	....	2	3	2	....	1	1	14	·11.47
Mules,	....	....	2	....	1	....	....	....	....	....	....	....	3	2.46
Machinery,	....	....	....	....	....	....	....	...	....	....	1	....	1	.82
Miscellaneous,	....	3	1	....	2	....	3	1	....	2	1	....	13	10.66
Totals,	4	9	9	10	13	10	11	13	13	9	15	6	122	100.00
Causes of Accidents Outside														
Cars,	2	1	1	....	....	....	1	....	....	....	1	....	6	40.00
Machinery,	1	....	....	....	....	....	....	....	....	....	....	....	1	6.67
Miscellaneous,	....	....	1	....	2	2	....	1	....	1	1	....	8	53.33
Totals,	3	1	2	....	2	2	1	1	....	1	2	....	15	100.00
Grand totals inside and outside,	7	10	11	10	15	12	12	14	13	10	17	6	137	

TABLE E.—Occupations of Persons Killed or Fatally Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Inside													
Miners,	3	2	2	2	....	....	1	4	1	1	5	1	22
Miners' laborers,	....	....	1	....	....	1	1	....	1	....	1	1	6
Drivers and runners,	....	....	....	....	....	1	....	....	....	....	....	....	1
Doorboys and helpers,	2	....	....	....	....	....	....	....	....	....	1	....	3
Company men,	....	....	....	....	1	....	....	....	....	....	....	....	1
Totals,	5	2	3	2	1	2	2	4	2	1	7	2	33
Outside													
All other employes,	....	....	....	1	....	1	....	....	2	....	....	....	4
Totals,	....	....	....	1	....	1	....	....	2	....	....	....	4
Grand totals inside and outside,	5	2	3	3	1	3	2	4	4	1	7	2	37

TABLE F.—Occupations of Persons Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Inside													
Fire bosses and assistants,	....	....	....	....	1	....	....	....	....	....	....	....	1
Miners,	3	3	3	2	5	6	4	7	7	6	5	2	53
Miners' laborers,	1	3	....	3	4	4	2	2	4	2	6	3	34
Drivers and runners,	....	1	4	1	2	....	2	4	1	1	3	....	19
Doorboys and helpers,	....	....	....	1	....	....	....	....	....	....	1	....	2
Pumpmen,	....	1	....	....	....	....	1	....	....	....	....	....	2
Company men,	....	1	2	3	....	....	2	....	1	....	....	1	10
All other employes,	....	....	....	....	1	....	....	....	....	....	....	....	1
Totals,	4	9	9	10	13	10	11	13	13	9	15	6	122
Outside													
Blacksmiths and carpenters,	....	....	....	....	...	....	....	1	....	....	....	....	1
Engineers and firemen,	1	....	....	....	....	....	....	....	....	....	....	....	1
All other employes,	2	1	2	....	2	2	1	....	....	1	2	....	13
Totals,	3	1	2	....	2	2	1	1	....	1	2	....	15
Grand totals inside and outside,	7	10	11	10	15	12	12	14	13	10	17	6	137

TABLE G.—Nationality of Persons Killed or Fatally Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
American,	2	....	....	....	....	....	....	....	1	....	....	....	3
Welsh,	....	....	....	....	....	....	....	....	....	....	1	....	1
German,	....	....	....	1	....	....	....	....	....	....	1	....	2
Polish,	1	2	2	....	....	3	2	1	1	1	3	2	18
Italian,	1	....	....	....	....	....	....	....	....	....	....	....	1
Slavonian,	....	....	....	....	1	....	....	....	....	....	....	....	1
Lithuanian,	....	....	....	2	....	....	....	1	1	....	1	....	5
Austrian,	....	....	....	....	....	....	....	1	....	....	1	....	2
Russian,	1	....	1	....	....	....	....	1	1	....	....	....	4
Totals,	5	2	3	3	1	3	2	4	4	1	7	2	37

TABLE H.—Nationality of Persons Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
American,	2	....	1	3	3	1	3	2	1	1	....	....	17
English,	....	....	....	1	....	....	....	1	....	....	1	....	3
Welsh,	....	2	....	....	3	....	1	2	....	....	2	....	10
Irish,	....	....	1	2	....	3	....	1	1	....	....	2	10
German,	....	....	....	....	....	....	1	....	2	....	....	....	3
Polish,	2	4	2	3	9	....	2	4	3	3	4	3	39
Hungarian,	....	....	1	....	....	....	....	....	....	....	2	....	3
Italian,	1	....	2	....	...	1	2	....	2	....	2	....	10
Slavonian,	....	2	3	....	....	1	....	1	2	4	1	....	14
Lithuanian,	2	2	....	....	....	3	....	2	1	1	1	1	13
Austrian,	....	....	....	....	....	1	....	....	....	....	3	....	4
Russian,	....	....	1	1	....	2	3	1	1	1	1	....	11
Totals,	7	10	11	10	15	12	12	14	13	10	17	6	137

TABLE I.—Operators and mines, kind of openings, type and size of fans, size of furnaces, volume of air produced by fan or furnace per minute, number of splits of air currents, and number of persons employed inside

Names of Operators and Mines	Kind of opening	Gaseous or non-gaseous	Method of ventilation	Diameter of fan in feet	Width of blades in feet	Depth of blades in feet	Number of revolutions per minute	Water gauge developed—in inches	Name of fan	Power used	Number of splits of air currents	Number of cubic feet of air per minute entering the mine at inlet	Total quantity of air per minute circulating in all the splits in cubic feet	Number of persons employed inside
Kingston Coal Co.														
Kingston No. 2 Colliery:														
Number 2,	Shaft,...	Gaseous,	Fan,.....	28	8	7.8	60	1.8	Guibal, ...	Steam, ...	6	109,240	94,100	216
Number 3,	Shaft,....	Gaseous,	Fan,.....	21	6	6.9	65	1.5			7	98,200	88,500	245
Kingston No. 4 Colliery:														
Number 1,	Shaft,...	Gaseous,	Fan,.....	20	5	5	86	1.8			7	136,000	118,900	252
Number 4,	Shaft,....	Gaseous,	Fan,.....	25	8	8	78	2.0			7	98,000	87,000	355
Temple Iron Co.														
Mt. Lookout,	Shaft,....	Gaseous,	2 Fans,	20	7	7	80	1.7	Guibal, ...	Steam, ...	9	160,943	153,175	299
				20	6.25	5.4	78	1.4						
Forty Fort,	Shaft,....	Gaseous,	Fan,.....	20	7	6.7	86	2	Guibal, ...	Steam, ...	8	151,260	105,950	400
Harry E.,	Shaft,....	Gaseous,	2 Fans,	20	8	6	80	1.5	Guibal, ...	Steam, ...	5	197,330	180,300	399
				15	4.5	4.5	85	.6						
Lehigh Valley Coal Co.														
Exeter Colliery:														
Red Ash,	Shaft,....	Gaseous,	2 Fans,..	20	6.8	5.10	76	1.2	Guibal, ...	Steam, ...	8	200,592	158,715	348
Pittston and Marcy, One opening,	Shaft,....	Gaseous,	Fan,.....	20	5.11	5.11	60	1.3			5	104,120	87,350	125
Knight and Checker,	Shaft,....	Gaseous,	Fan,.....	20	6.11	6.7	60	.9			4	95,600	84,700	120
Maltby Colliery:														
Number 2,	Shaft,....	Gaseous,	2 Fans,	25	8.11	6.10	72	3	Guibal, ...	Steam, ...	10	133,870	112,292	298
				20	5.11	5.8	82	2.5						
Mountain Tunnel,	Tunnel,..	Non-gas.	Fan,.....	6	1.6	1.4	180	.5	Guibal, ...	Steam, ...	3	42,015	35,465	29
Outside Slope,	Slope,....	Non-gas.	Fan,.....	12	4	4	82	.5			2	61,025	51,818	31

Westmoreland Colliery:														
Westmoreland,	Tunnel,	Gaseous,	Fan,	16	5	4.7	54	.5	Guibal,	Steam,	2	125,000	112,000	170
Clear Spring Coal Co.														
Clear Spring,	Shaft,	Gaseous,	2 Fans,	24	8	6	60	.8	Guibal,	Steam,	5	215,000	210,000	463
Stevens Coal Co.														
Stevens Colliery:														
Number 1,	Slope,	Gaseous,	Fan,	20	5	6	65	1.3	Guibal.	Steam,	5	119,500	117,000	169
Number 2,	Shaft,	Gaseous,	Fan,	20	5	7	70	1.1	Guibal,	Steam,	3	84,000	70,500	102
Peoples' Bank of Wilkes-Barre, Receiver,														
Black Diamond,	Shaft,	Gaseous,	Fan,	20	6.6	6	90	1.7	Guibal,	Steam,	5	139,000	61,200	236
Raub Coal Co.														
Louise Colliery:														
Mount Thomas,	Tunnel,	Non-gas.	Fan,	13	3.1	3.1	120	.8	Guibal,	Steam,	2	33,000	19,000	78
Klondike,	Tunnel,	Non-gas.	Natural,	......	......	......	......	......	......	......	2	32,000	16,000	62
Bennett,	Slope,	Non-gas.	Natural,	......	......	......	......	......	......	......	1	20,000	20,000	12
Waddells,	Slope,	Non-gas.	Natural,	......	......	......	......	......	......	......	3	53,000	48,500	68
East Boston Coal Co.														
East Boston,	Shaft,	Gaseous,	Fan,	25	8	7.75	76	2.7	Guibal,	Steam,	7	149,900	107,800	183
Delaware, Lackawanna and Western Railroad Co.														
Pettebone Colliery:														
Pettebone No. 1,	Shaft,	Gaseous,	Fan,	22	6.2	6	120	1.7	Dickson,	Steam.	......	......	......	......
Pettebone,	Shaft,	Gaseous,	Fan,	35	10.1	9.1	52	2.3	Dickson,	Steam,	9	127,800	103,500	67
Troy Coal Co.														
Troy,	Tunnel,	Non-gas.	Fan,	16	4.4	4	58	.5	Guibal,	Steam,	3	46,655	40,205	54
Dunn Coal Co.														
Mountain Top,	Slope,	Non-gas.	Natural,	......	......	......	......	......	......	......	......	......	......	......

TABLE 1.—Operators, location of collieries, railroads, etc.

Names of Operators and Collieries	County	Name of General Superintendent	Post Office	Name of Superintendent	Post Office	Railroad to Mine
Kingston Coal Co.						
Kingston No. 2,	Luzerne,	F. E. Zerby,	Wilkes-Barre,	Thos. H. Williams,	Edwardsville,	D. L. and W.
Kingston No. 4,						
Temple Iron Co.						
Mount Lookout,	Luzerne,	F. H. Hemelright,	Scranton,	George Steel,	Pittston,	D. L. and W. and L. V.
Forty Fort,						Lehigh Valley
Harry E.,						Lehigh Valley
Lehigh Valley Coal Co.						
Exeter,	Luzerne,	S. D. Warriner,	Wilkes-Barre,	Thomas Thomas,	Wilkes-Barre,	Lehigh Valley
Maltby,						
Westmoreland,						
Clear Spring Coal Co.						
Clear Spring,	Luzerne,	J. L. Cake,	Pittston,	J. Paul Cake,	Pittston,	D. L. and W.
Clear Spring Washery,						
Stevens Coal Co.						
Stevens,	Luzerne,	Henry W. Kingsbury.	Scranton,	D. W. Evans,	Pittston,	Lehigh Valley
Peoples' Bank of Wilkes-Barre, Receiver						
Black Diamond,	Luzerne,	James B. Davis.	Luzerne,	James B. Davis.	Plymouth,	Lehigh Valley and D. L. and W.
Black Diamond Washery,						
Raub Coal Co.						
Louise,	Luzerne,	W. J. Thomas,	Luzerne,	W. J. Thomas,	Luzerne,	Lehigh Valley
East Boston Coal Co.						
East Boston,	Luzerne,	W. J. Payne,	Kingston,	W. J. Payne,	Kingston.	Lehigh Valley and D. L. and W.
Delaware. Lackawanna and Western Railroad Co.						
Pettebone,	Luzerne,	R. A. Phillips.	Scranton,	H. G. Davis,	Kingston.	D. L. and W.
Pettebone Washery,						
Troy Coal Co.						
Troy,	Luzerne,	M. J. Healey,	Plains,	A. J. Duffey,	Plains,	Lehigh Valley
Dunn Coal Co.						
Mountain Top,	Luzerne,	Thomas A. Dunn.	Wilkes-Barre,	Thomas A. Dunn,	Wilkes-Barre,	Coal hauled on wagons to D. and H.

TABLE 2.—Number of tons of coal mined, number of days worked, number of persons employed, number killed and injured, quantity of powder and dynamite used, etc.

Names of Operators and Collieries	County	Number of tons of coal shipped to market	Number of tons used at collieries for steam and heat	Number of tons sold to local trade and used by employes	Total production of coal in tons	Number of days worked	Number of employes	Number of fatal accidents	Number of non-fatal accidents	Number of kegs of powder used	Number of pounds of dynamite used	Number of horses and mules
Kingston Coal Co.												
Kingston No. 2,	Luzerne,	621,964	12,192	39,803	673,959	277	1,288	6	9	24,118	1,100	153
Kingston No. 4,		671,073	27,600	14	698,687	279	1,179	2	48	24,312	20,650	135
Totals,	....	1,293,037	39,792	39,817	1,372,646	....	2,467	8	57	48,430	21,750	288
Temple Iron Co.												
Mount Lookout,	Luzerne,	209,613	41,500	5,842	256,955	227	828	7	7	9,211	126,296	54
Forty Fort,		282,298	34,984	2,337	319,619	248	790	5	5	11,663	85,350	80
Harry E.,		299,957	60,811	3,468	364,236	251	824	3	17	12,571	51,275	98
Totals,	....	791,868	137,295	11,647	940,810	....	2,442	15	29	33,445	262,921	232
Lehigh Valley Coal Co.												
Exeter,	Luzerne,	398,854	29,695	4,813	433,362	251	750	1	19	7,248	171,175	121
Maltby,		282,645	30,270	4,348	317,263	247	553	3	7	9,172	140,740	98
Westmoreland,		110,087	23,535	1,526	135,148	226	307	2	2	3,117	111,280	52
Totals,	....	791,586	83,500	10,687	885,773	....	1,610	6	28	19,537	423,195	271
Clear Spring Coal Co.												
Clear Spring,	Luzerne,	188,520	10,000	14,663	213,183	248	674	1	1	10,011	21,825	72
Clear Spring Washery,		58,824	....	1,209	60,033	....	33	....	....	....	....	....
Totals,	....	247,344	10,000	15,872	273,216	....	707	1	1	10,011	21,825	72

TABLE 2.—Continued

Names of Operators and Collieries	County	Number of tons of coal shipped to market	Number of tons used at collieries for steam and heat	Number of tons sold to local trade and used by employes	Total production of coal in tons	Number of days worked	Number of employes	Number of fatal accidents	Number of non-fatal accidents	Number of kegs of powder used	Number of pounds of dynamite used	Number of horses and mules
Stevens Coal Co.												
Stevens,	Luzerne,	138,210	25,000	4,718	167,928	242	350	......	5	4,016	61,700	51
Peoples' Bank of Wilkes-Barre, Receiver												
Black Diamond,	Luzerne,	123,803	8,800	4,761	137,364	221	363	1	5	1,900	17,800	47
Black Diamond Washery,		....	22,400	....	22,400	....	....	.....	.....	....	....	....
Totals,	....	123,803	31,200	4,761	159,764	....	363	1	5	1,900	17,800	47
Raub Coal Co.												
Louise,	Luzerne,	85,482	20,575	9,008	115,065	174	413	3	4	4,170	17,300	38
East Boston Coal Co.												
East Boston,	Luzerne,	81,180	25,000	5,291	111,471	159	360	......	6	2,583	10,750	42
Delaware, Lackawanna and Western Railroad Co.												
Pettebone,	Luzerne,	26,070	9,117	4,265	39,452	43	179	2	2	1,256	14,150	30
Pettebone Washery,		40,755	....	....	40,755	....	26	.....	.....	....	....	....
Totals,	....	66,825	9,117	4,265	80,207	....	205	2	2	1,256	14,150	30
Troy Coal Co.												
Troy,	Luzerne,	23,170	6,700	1,078	30,948	228	99	1	......	930	6,400	12
Dunn Coal Co.												
Mountain Top,	Luzerne,	5,594	57	1,842	7,493	202	33	......	......	48	5,675	7
Grand totals,	....	3,648,099	388,236	108,986	4,145,321	....	9,049	37	137	126,326	863,466	1,090

TABLE 2.—Part 2

Names of Operators	County	Number of Boilers					Locomotives			Number of steam engines of all classes	Total horse power	Number of pumps delivering water to surface	Capacity in gallons per minute	Quantity delivered to surface per minute—gallons	Number of electric dynamos	Number of air compressors
		Cylindrical	Horse power	Tubular	Horse power	Total horse power	Steam	Air	Electric							
Kingston Coal Co.,	Luzerne,	......	....	20	4,950	4,950	5	......	7	31	4,850	5	6,440	3,160	2	2
Temple Iron Co.,		9	450	22	5,830	6,280	2	......	7	67	4,375	10	12,900	5,500	3	5
Lehigh Valley Coal Co.,		......	....	19	4,500	4,500	2	3	1	60	6,490	9	7,050	6,700	3	1
Clear Spring Coal Co.,		3	150	10	1,500	1,650	......	......	1	10	1,800	3	4,000	3,000	1	....
Stevens Coal Co.,		......	....	10	1,600	1,600	1	......	1	14	1,220	5	4,300	2,750	1	1
Peoples' Bank of Wilkes-Barre, Receiver,		......	....	18	2,518	2,518	1	......	......	39	1,975	2	3,806	2,500	....	1
Raub Coal Co.,		......	....	4	900	900	2	......	......	19	1,010	1	500	300	....	....
East Boston Coal Co.,		......	....	7	1,262	1,262	......	......	......	27	1,258	2	4,000	2,800	....	2
Delaware, Lackawanna and Western Railroad Co.,		......	....	10	1,350	1,350	......	......	......	28	2,806	2	160	160	1	....
Troy Coal Co.,		......	....	4	395	395	......	......	......	4	205	2	150	75	....	....
Dunn Coal Co.,		......	....	2	44	44	......	......	......	1	28	1	15	8	....	....
Totals,	....	12	600	126	24,849	25,449	13	3	17	300	26,017	42	43,321	26,953	11	12

TABLE 3.—Number of each class of employes inside and outside of mines

Names of Operators and Collieries	County	Inside											Outside									Grand total inside and outside
		Mine foremen	Assistant mine foremen	Fire bosses and assistants	Miners	Miners' laborers	Drivers and runners	Doorboys and helpers	Pumpmen	Company men	All other employes	Total inside	Superintendents	Foremen	Blacksmiths and carpenters	Engineers and firemen	Slate pickers (boys)	Slate pickers (men)	Bookkeepers and clerks	All other employes	Total outside	
Kingston Coal Co.																						
Kingston No. 2,	Luzerne,	3	3	1	378	270	129	27	1	45	101	958	....	1	36	16	47	40	3	187	330	1,288
Kingston No. 4,		2	2	5	342	230	112	17	9	30	115	864	....	1	25	30	54	34	3	168	315	1,179
Totals,		5	5	6	720	500	241	44	10	75	216	1,822	....	2	61	46	101	74	6	355	645	2,467
Temple Iron Co.																						
Mount Lookout,	Luzerne,	2	....	3	350	135	48	20	12	50	61	681	2	1	12	24	22	9	3	74	147	828
Forty Fort,		1	2	2	325	100	53	25	8	43	80	639	....	1	13	12	53	13	2	57	151	790
Harry E.,		1	1	4	245	190	85	42	7	26	60	661	....	1	16	17	41	15	2	71	163	824
Totals,		4	3	9	920	425	186	87	27	119	201	1,981	2	3	41	53	116	37	7	202	461	2,442
Lehigh Valley Coal Co.																						
Exeter,	Luzerne,	2	....	5	262	123	68	......	7	......	95	562	....	1	13	22	17	5	3	127	188	750
Maltby,		1	2	5	198	77	53	......	5	......	44	385	....	1	14	18	22	3	3	107	168	553
Westmoreland,		1	1	1	115	35	29	5	8	......	38	233	....	1	7	8	10	......	2	46	74	307
Totals,		4	3	11	575	235	150	5	20	......	177	1,180	....	3	34	48	49	8	8	280	430	1,610
Clear Spring Coal Co.																						
Clear Spring,	Luzerne,	1	2	4	220	140	49	27	6	20	56	525	1	1	4	19	62	6	4	52	149	674
Clear Spring Washery,		....	....	....	......	......	......	......	....	......	......	....	....	1	......	1	3	......	....	28	33	33
Totals,		1	2	4	220	140	49	27	6	20	56	525	1	2	4	20	65	6	4	80	182	707

Stevens Coal Co.																						
Stevens, ...	Luzerne,.......	1	1	2	106	59	38	3	4	15	8	237	1	1	8	14	25	4	3	57	113	350
Peoples' Bank of Wilkes-Barre, Receiver																						
Black Diamond, ... Black Diamond Washery, ...	Luzerne,.......	1	1	6	62	50	23	7	4	75	20	249	....	1	6	16	21	18	2	50	114	363
Raub Coal Co.																						
Louise, ...	Luzerne,.......	1	3	1	130	42	38	9	3	10	23	260	1	1	8	20	50	6	2	65	153	413
East Boston Coal Co.																						
East Boston, ...	Luzerne,.......	1	2	3	43	36	48	8	6	80	......	227	1	1	5	17	46	22	4	37	133	360
Delaware, Lackawanna and Western Railroad Co.																						
Pettebone, ...	Luzerne,.....	1	....	2	21	24	13	3	2	6	57	129	....	1	4	18	5	1	1	20	50	179
Pettebone Washery, ...		....	....	....	......	......	......	......	....	......	......	....	....	1	1	2	2	......	....	20	26	26
Totals, ...	....	1	....	2	21	24	13	3	2	6	57	129	....	2	5	20	7	1	1	40	76	205
Troy Coal Co.																						
Troy, ...	Luzerne,.......	1	....	1	30	15	8	2	2	3	......	62	1	1	3	4	12	12	1	3	37	99
Dunn Coal Co.																						
Mountain Top, ...	Luzerne,.......	1	....	....	5	10	3	......	1	......	......	20	1	....	1	1	2	......	1	7	13	33
Grand totals, ...	....	21	20	45	2,832	1,536	797	195	85	403	758	6,692	8	17	176	259	494	188	39	1,176	2,357	9,049

TABLE 3.—Part 2

Names of Operators and Collieries	County	Number of Days Worked in Breaker												
		January	February	March	April	May	June	July	August	September	October	November	December	Total
Kingston Coal Co.														
Kingston No. 2,	Luzerne,	24	21	18	23	25	24	23	25	23	25	22	24	277
Kingston No. 4,		24	23	18	23	24	24	24	25	21	26	23	24	279
Temple Iron Co.														
Mount Lookout,	Luzerne,	22	19	23	21	22	19	....	19	19	21	21	21	227
Forty Fort,		24	21	21	21	22	21	19	19	17	21	21	21	248
Harry E.,		21	19	20	20	21	21	21	23	22	23	17	23	251
Lehigh Valley Coal Co.														
Exeter,	Luzerne,	24	20	20	22	20	21	21	20	18	21	22	22	251
Maltby,		24	19	19	21	20	21	21	20	18	22	22	20	247
Westmoreland,		26	21	19	20	....	16	21	17	18	22	22	24	226
Clear Spring Coal Co.														
Clear Spring,	Luzerne,	20	20	23	11	24	19	21	22	21	24	21	22	248
Stevens Coal Co.														
Stevens,	Luzerne,	21	18	19	18	20	19	20	23	20	23	20	21	242
Peoples' Bank of Wilkes-Barre, Receiver														
Black Diamond,	Luzerne,	20	19	19	18	18	17	17	18	18	19	19	19	221
Raub Coal Co.														
Louise,	Luzerne,	16	14	16	7	7	14	16	19	16	16	17	16	174
East Boston Coal Co.														
East Boston,	Luzerne,	17	15	15	13	12	12	11	11	12	13	14	14	159
Delaware, Lackawanna and Western Railroad Co.														
Pettebone,	Luzerne,	7	6	5	3	3	4	3	2	2	3	3	2	43
Troy Coal Co.														
Troy,	Luzerne,	19	17	14	6	22	20	19	22	22	24	21	22	228
Dunn Coal Co.														
Mountain Top,	Luzerne,	....	....	....	14	18	22	24	25	25	26	24	24	202

TABLE 4.—Fatal accidents inside and outside of mines

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Number of widows	Number of orphans	Name of Mine	County	Nature and Cause of Accident in Brief
Jan.	4	Simon Potok,	Russian,	Miner,	23	S.	...	....	Kingston No. 3,	Luzerne,	Instantly killed by fall of rock in the Orchard vein while removing a prop.
	4	Angelo Lucarrelli	Italian,	Miner,	32	S.	...	....	Mount Lookout,		Instantly killed by falling down the shaft from 11 Foot vein to Red Ash vein.
	26	James Brennan,	American,	Doortender,	16	S.	...	....	Kingston No. 3,		Head crushed between car and rib in Ross vein.
	28	Frank Yamar,	Polish,	Miner,	29	M.	1	....	Forty Fort,		Fatally burned about hands and face by powder at face of chamber, Ross vein. A spark dropped from his lighted lamp into cartridge.
	30	Charles Derhammer,	American,	Doortender,	16	S.	...	....	Harry E.,		Fatally burned by his mining lamp setting his clothes on fire while he was asleep in the Red Ash vein.
Feb.	18	Frank Zuris,	Polish,	Miner,	52	M.	1	....	Westmoreland,		Instantly killed near the face of his chamber in Pittston vein by fall of top rock.
	22	John Butenskey,	Polish,	Miner,	42	M.	1	2	Mount Lookout,		Instantly killed by premature blast on road 8, Marcy vein, near the face of his chamber.
March	4	Joseph Savick,	Polish,	Laborer,	41	M.	1	4	Kingston No. 2,		Instantly killed by fall of top coal in the face of his chamber, in the Bennett vein.
	8	Frank Shanofoni,	Russian,	Miner,	22	S.	...	....	Forty Fort,		Instantly killed by falling down shaft.
	25	Joseph Karchman,	Polish,	Miner,	40	M.	1	3	Maltby,		Instantly killed by fall of rock in the face of his chamber, 6 Foot vein.
April	4	Anthony Keil,	German,	Laborer,	48	M.	1	5	Forty Fort,		Fatally injured by being struck by railroad cars near the breaker. Outside.
	6	Mike Blazes,	Lithuanian,	Miner,	40	M.	1	1	Pettebone,		Fatally burned by an explosion of gas in face of his chamber in 5 Foot vein.
	20	George Levitch,	Lithuanian,	Miner,	25	S.	....	....	Kingston No. 4,		Fatally injured by fall of dividing rock in face of his chamber, No. 1, East Ross vein.
May	25	John Rusnock,	Slavonian,	Foot tender,	25	M.	1	2	Harry E.,		Instantly killed by being squeezed between carriage and rib at foot of the shaft.

TABLE 4.—Continued

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Number of widows	Number of orphans	Name of Mine	County	Nature and Cause of Accident in Brief
June	12	John Jodash,	Polish,	Loader,	24	S.	...	....	Maltby,	Luzerne,	Fatally injured by being run over by railroad car near the breaker. Outside.
	22	Frank Pereski,	Polish,	Driver,	20	S.	...	....	Louise,		Instantly killed by falling down the shaft from Ross vein to Red Ash vein.
	25	Paul Totskoe,	Polish,	Laborer,	27	S.	...	....	Mount Lookout,		Instantly killed by fall of top rock in the face of his place, Red Ash vein.
July	24	Peter Shesnick,	Polish,	Laborer,	21	S.	...	....	Louise,		Instantly killed near the face of his gangway in Red Ash vein by fall of top rock.
	30	Leon Wasneck,	Polish,	Miner,	28	S.	...	....	Westmoreland,		Fatally injured by premature blast in face of his chamber, in the Marcy vein.
Aug.	12	Matt Patolovitch,	Lithuanian,	Miner,	52	M.	1	5	Forty Fort,		Instantly killed by fall of top rock in face of his chamber, Ross vein.
	19	George Gunack,	Austrian,	Miner,	28	S.	...	....	Mount Lookout,		Instantly killed by fall of top rock in the face of chamber, Marcy vein.
	23	Stanley Klemesh,	Polish,	Miner,	34	M.	1	....	Kingston No. 4,		Instantly killed by fall of top rock in the face of chamber, Ross vein.
	27	Mike Gerrick,	Russian,	Miner,	39	M.	1	....	Kingston No. 3,		Fatally injured by piece of bony and slate shooting out of the face of his gangway, Ross vein.
Sept.	10	Sabot Cobets,	Polish,	Miner,	27	M.	1	2	Kingston No. 2,		Instantly killed by fall of top rock in the face of his chamber, Lance vein.
	13	Tim Cosinos,	Russian,	Laborer,	27	M.	1	....	Kingston No. 2,		Fatally injured by a car running over him under the breaker. Outside.
	16	Wrighter Hill,	American,	Boss loader,	32	S.	...	....	Maltby,		Instantly killed by an elevator bucket that was carelessly thrown out of the breaker window on his head as he was passing under. Outside.
	26	John Petulis,	Lithuanian,	Laborer,	20	S.	...	....	Black Diamond,		Instantly killed by cars on the Cooper slope, caused by the breaking of the rope.
Oct.	8	John B. Garren,	Polish,	Miner,	36	S.	...	....	Clear Spring,		Killed instantly by fall of rock in the face of his chamber, Pittston vein.

Nov.	4	Joseph Chekoski,	Polish,	Miner,	32	S.	...	....	Louise,	Luzerne,	Killed instantly by fall of top rock in the face of his gangway, Red Ash vein.
	9	John Morris,	Welsh,	Miner,	42	M.	...	3	Pettebone,		Instantly killed by fall of rock in the face of rock plane, Cooper vein.
	12	William Suzpcnas,	Lithuanian,	Miner,	22	S.	...	....	Harry E.,		Fatally injured by being burned by an explosion of gas in lift 32, Red Ash vein.
	14	John Rinks,	Polish,	Patcher,	19	S.	...	....	Mount Lookout,		Fatally injured by falling under cars in main gangway, Marcy vein.
	19	Frank Lawrence,	Polish,	Miner,	22	S.	...	....	Mount Lookout,		Instantly killed by premature blast, while in the act of tamping a hole in the Marcy vein.
	19	Harry Bartholmew,	German,	Miner,	37	M.	1	4	Troy,		Instantly killed by fall of rider coal in his chamber, Clark vein.
	21	Mike Socash,	Austrian,	Laborer,	41	M.	1	4	Exeter,		Fatally injured by fall of dividing rock in face of his chamber, Red Ash vein.
Dec.	18	John Picke,	Polish,	Miner,	45	M.	1	5	Forty Fort,		Fatally injured in the face of his chamber by fall of top rock, in Ross vein.
	20	Frank Shemonis,	Polish,	Laborer,	40	M.	1	3	Mount Lookout,		Instantly killed by a shock from the electric trolley wire in the Red Ash vein.

TABLE 5.—Non-fatal accidents inside and outside of mines

Date of accident	Name of Person	Nationality	Occupation	Age	Married or single	Name of Mine	County	Nature and Cause of Accident in Brief
Jan. 4	Mike Ross,	Italian,	Loader,	35	S.	Clear Spring,	Luzerne,	Leg broken by car running over it. Outside.
4	Anthony Purkis,	Lithuanian,	Miner,	25	S.	Kingston No. 4,		Hands and face burned by an explosion of gas in the Ross vein.
7	George Givens,	American,	Engineer,	30	M.	Mount Lookout,		Arm broken by his clothing being caught by crank pin. Outside.
9	Frank Sheridan,	American,	Boss loader,	20	S.	Louise,		Foot badly bruised by being caught under wheel of railroad car. Outside.
12	Mike Stennel,	Lithuanian,	Laborer,	28	S.	Kingston No. 1,		Leg broken by fall of rock in his chamber, Orchard vein.
18	Alfonce Featherwich,	Polish,	Miner,	30	M.	Maltby,		Face badly disfigured by a premature explosion of powder in his chamber.
21	Wm. Potash,	Polish,	Miner,	28	S.	Stevens,		Leg fractured by fall of slate in his chamber, Marcy vein.
Feb. 1	Ed. Gernesky,	Polish,	Laborer,	21	S.	Harry E.,		Cut on the head by a piece of coal that rolled down a chute and struck him.
4	John Sorbosky,	Polish,	Laborer,	44	M.	Kingston No. 3,		Hip dislocated by fall of rock in the Orchard vein.
4	Steve Urek,	Lithuanian,	Miner,	38	S.	Kingston No. 1,		Bruised about the back and shoulders by fall of slate.
4	Enoch Ignuts,	Lithuanian,	Laborer,	34	S.	Kingston No. 1,		Cut on the head and left leg by fall of slate.
8	John Durzak,	Slavonian,	Laborer,	35	M.	Maltby,		Three fingers crushed by an empty car running over them. Outside.
15	Anthony Visnesky,	Polish,	Miner,	35	M.	Kingston No. 1,		Burned about the head and shoulders by an explosion of gas.
15	Wm. Jones,	Welsh,	Pump runner,	23	S.	Kingston No. 1,		Burned slightly around the head by an explosion of gas.
18	Roman Rusabouski,	Polish,	Miner,	32	M.	Louise,		Injured on the back by fall of rock in the face of his chamber.
23	John Kisura,	Slavonian,	Driver,	17	S.	Exeter,		Head cut by a piece of slate thrown at him by another boy.
28	Gwellym Lloyd,	Welsh,	Bratticeman,	30	M.	Kingston No. 4,		Small bone of leg broken by an iron pipe falling on him.

March	2	Pat Guiga,	Russian,	Laborer,	35	M.	Kingston No. 4,	Luzerne,	Knee bruised between cars in timber yard.
	8	James Ruen,	Italian,	Miner,	30	S.	Kingston No. 4,		Burned on hands and face by an explosion of gas in face of his chamber.
	12	Mike Sayko,	Slavonian,	Foot tender,	40	M.	Exeter,		Cut on the leg above the knee by a piece of coal falling from the breaker. Outside.
	15	John Zurer,	Polish,	Driver,	19	S.	Mount Lookout,		Leg broken by being caught under car in the Red Ash vein.
	18	Harry Jones,	American,	Driver,	16	S.	East Boston,		Bruised about the shoulders by being squeezed between car and rib.
	20	John Gaughan,	Irish,	Headman,	41	M.	Westmoreland,		Squeezed about the body by cars on the slope in Marcy vein.
	22	John Kain,	Polish,	Miner,	40	S.	Exeter,		Right arm and chest injured by fall of coal in face of his breast.
	25	Robert Leigar,	Hungarian,	Foot tender,	26	S.	East Boston,		Leg badly bruised above the ankle by bonnet of carriage falling on him.
	25	Joseph Booza,	Slavonian,	Driver,	20	S.	Kingston No. 4,		Badly cut on the face by being kicked by a mule in No. 2 Red Ash vein.
	28	Antoni Gai,	Italian,	Miner,	22	S.	Stevens,		Leg broken below the knee by being shot through cross-cut of next chamber.
	30	George Burashe,	Slavonian,	Driver,	18	S.	Kingston No. 4,		Face lacerated by being kicked by a mule in Ross vein.
April	3	Mathew Ford,	Irish,	Company man,	24	M.	Kingston No. 2,		Fracture of the foot by being caught between bumper of cars.
	3	Joseph Chica,	Polish,	Laborer,	23	S.	Kingston No. 2,		Fingers taken off by being caught under wheel of car.
	9	John Burkes,	Polish,	Miner,	30	S.	Kingston No. 4,		Burned on hands and face by an explosion of gas in face of his chamber.
	9	Henry Boyer,	American,	Runner,	18	S.	Exeter,		Two fingers badly crushed by cars on road 43.
	16	Joseph Allen,	English,	Laborer,	37	M.	Forty Fort,		Slightly injured about head and legs by cars.
	16	Frank Brooks,	Polish,	Door tender,	17	S.	Mount Lookout,		Leg broken above the ankle by cars jumping the track and striking him.
	16	John McDonough,	American,	D. driller,	28	M.	Exeter,		Burned on face and hands by an explosion of gas in Marcy vein.
	19	Thomas Powell,	American,	Foot tender,	22	M.	Exeter,		Hand crushed by car running over it at foot of Red Ash shaft.
	22	John Mullarkey,	Irish,	Miner,	31	S.	East Boston,		Leg fractured by fall of rock in face of his chamber, Lance vein.
	25	Joseph Kovelosky,	Russian,	Laborer,	21	S.	Exeter,		Two fingers taken off between car and roof of his chamber.
May	1	George W. McMullen,	American,	Yard master,	59	M.	Exeter,		Collar bone broken by falling off cars while unloading props. Outside.
	3	Peter Solvelesky,	Polish,	Miner,	46	M.	Harry E.,		Hand and foot badly bruised by fall of rock in face of chamber.
	6	Thomas H. Williams,	Welsh,	Superintendent,	38	M.	Kingston No. 4,		Face and hands burned by an explosion of gas in No. 2 Ross slope.
	6	Lemuel Fine,	American,	Fire boss,	44	M.	Kingston No. 4,		Face and hands burned by an explosion of gas in No. 2 Ross slope.
	11	John Kulbarsky,	Polish,	Laborer,	18	S.	Harry E.,		Left foot bruised by being squeezed on carriage by a piece of sheet iron.

TABLE 5.—Continued

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Name of Mine	County	Nature and Cause of Accident in Brief
May	14	Thos. Howells,	Welsh,	Laborer,	30	M.	Kingston No. 4,	Luzerne,	Bruised on head by a prop rolling off a car and striking him. Outside.
	17	John Morris,	Welsh,	Driver,	18	S.	Kingston No. 1,		Six teeth knocked out by being kicked by a mule.
	18	Joseph Marenkas,	Polish,	Miner,	32	S.	Mount Lookout,		Right side injured by a piece of prop that he was blasting out.
	23	Philip Goodkofskie,	Polish,	Miner,	30	S.	Forty Fort,		Legs broken and hip lacerated by fall of rock in face of chamber.
	24	James Trudgen,	American,	Driver,	18	S.	Harry E.,		Leg broken by being squeezed between door and car, Red Ash vein.
	24	Frank Arnist,	Polish,	Miner,	24	S.	Harry E.,		Head cut and bruised by flying pieces of coal from a blast in face of chamber.
	24	Jacob Meroskey,	Polish,	Laborer,	23	S.	Harry E.,		Leg fractured by a drill striking him while tamping a hole, which exploded.
	25	Charles Rejaski,	Polish,	Miner,	31	M.	Maltby,		Hands cut by flying pieces of coal from premature blast.
	25	Anthony Rejaski,	Polish,	Laborer,	20	S.	Maltby,		Face and eyes injured by fine particles of coal from premature blast.
	27	Aleck Felesky,	Polish,	Laborer,	19	S.	Kingston No. 1,		Left hand smashed and face cut by fall of coal in face of chamber.
June	1	Andrew Brennan,	Irish,	Miner,	35	M.	Exeter,		Arms and face burned by an explosion of gas in Rock plane.
	1	John Donnely,	Irish,	Laborer,	38	M.	Exeter,		Face and hands burned by an explosion of gas in Rock plane.
	3	Adam Baram,	Slavonian,	Miner,	48	M.	Kingston No. 2,		Left leg broken above the ankle by fall of top coal in his chamber.
	3	Frank Degruch,	Italian,	Laborer,	17	S.	Pettebone,		Left arm broken by falling from a trestling at washery. Outside.
	10	John Booza,	Lithuanian,	Miner,	34	M.	Kingston No. 1,		Leg and collar bone broken by fall of rock in chamber.
	10	John Goodsmovitch,	Lithuanian,	Laborer,	32	M.	Kingston No. 1,		Collar bone broken in face of chamber by fall of rock in Bennett vein.
	11	Anthony Mateavage,	Lithuanian,	Miner,	45	M.	Black Diamond,		Toe broken, head cut and back injured by fall of rock in face of chamber.

June	13	Michael Breman, ...	Irish, ...	Miner, ...	34	M.	Kingston No. 3, ...	Luzerne,....	Back injured by fall of rock in face of chamber, Orchard vein.
	14	Frank Keta, ...	Austrian,....	Laborer, ...	28	M.	Kingston No. 3, ...		Back injured by fall of rock in face of chamber, Orchard vein.
	18	Ralph Polen, ...	American, ..	Laborer, ...	25	M.	Exeter, ...		Two fingers cut off by circular saw in car shop. Outside.
	29	Joseph Witohcorsky, ...	Russian, ...	Miner, ...	42	M.	Exeter, ...		Burned about hands and face by an explosion of gas in Babylon vein.
	29	Wm. Kupusta, ...	Russian, ...	Laborer, ...	19	S.	Exeter, ...		Burned about hands and face by an explosion of gas in Babylon vein.
July	11	John Frenzen, ...	German,.....	Miner, ...	44	M.	Forty Fort, ...		Head lacerated and bruised by flying coal from premature blast.
	17	David Thomas, ...	Welsh, ...	Runner, ...	21	S.	Exeter, ...		Cut on the head and left leg by fall of rock in gangway.
	20	Joseph Bognitus, ...	Polish, ...	Laborer, ...	26	M.	Harry E., ...		Contusion of the hip by flying pieces from premature blast.
	21	Wm. Bauchart, ...	American, ..	Machinist, ...	34	M.	Harry E., ...		Head and body scalded by steam. The flange on pipe burst.
	21	Daniel Driscoll, ...	American, ..	Pump runner, ..	46	M.	Harry E., ...		Both hands scalded by steam. The flange on pipe burst.
	21	Patrick Curley, ...	American, ..	Machinist, ...	23	S.	Harry E., ...		Both hands and face scalded by steam. The flange on pipe burst.
	22	Paul Tell, ...	Italian,......	Miner, ...	28	S.	Harry E., ...		Head and hands bruised by fall of slate in face of chamber.
	22	Peter Kerloftus, ...	Polish, ...	Miner, ...	40	S.	Kingston No. 4, ...		Two ribs broken by fall of top coal in face of chamber.
	26	Joseph Sandell, ...	Italian,......	Laborer, ...	36	M.	Kingston No. 4, ...		Heel of right foot crushed by being caught under car wheel. Outside.
	29	John Honozo, ...	Russian, ...	Driver, ...	17	S.	Kingston No. 2, ...		Left leg bruised by car running over it at top of plane.
	31	Ignus Beroski, ...	Russian, ...	Miner, ...	30	S.	Kingston No. 4, ...		Face and hands burned by an explosion of gas in Red Ash vein.
	31	Alex Ternaski, ...	Russian, ...	Laborer, ...	24	S.	Kingston No. 4, ...		Burned on hands and face by an explosion of gas in Red Ash vein.
Aug.	2	Paul Franchack, ...	Polish, ...	Laborer, ...	43	M.	Kingston No. 4, ...		Collar bone broken and back and leg injured by fall of rock.
	2	John Levi, ...	Welsh, ...	Runner, ...	28	S.	Kingston No. 1, ...		Right leg broken below the knee by cars running over it on slope.
	6	Peter Verasky, ...	Lithuanian,	Miner, ...	32	M.	Kingston No. 1, ...		Nose fractured by flying pieces of coal from premature blast.
	7	Thomas Bennett, ...	American, ..	Runner, ...	24	S.	Kingston No. 2, ...		Right hand lacerated by being caught between car and brake.
	8	Peter McCloskey, ...	Russian, ...	Miner, ...	40	M.	Exeter, ...		Burned about hands and face by an explosion of gas in Red Ash vein.
	8	Mike Melaska, ...	Slavonian, .	Laborer, ...	34	M.	Kingston No. 4, ...		Injured about the hips. Caught between door frame and car.
	10	John Dembrosky, ...	Polish, ...	Miner, ...	44	M.	Kingston No. 4, ...		Left leg broken below the knee by fall of rock in face of chamber.
	12	Stanley Rozratch, ...	Polish, ...	Miner, ...	44	M.	Kingston No. 1, ...		Squeezed about the head. Caught between prop and roof in chamber.
	17	Brice Kemp, ...	English,.....	Carpenter, ...	23	M.	Stevens, ...		Fingers on right hand cut off by planer in car shop. Outside.
	19	Wm. Hughes, ...	Welsh, ...	Miner, ...	31	M.	Kingston No. 1, ...		Face and hands cut by cars jumping the track in Orchard vein.

TABLE 5.—Continued

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Name of Mine	County	Nature and Cause of Accident in Brief
Aug.	20	Peter Yoblowski, ...	Polish, ...	Miner, ...	27	S.	Black Diamond, ...	Luzerne, ...	Contusion of back and chest and laceration of head and hands by a fall of coal.
	20	Denis Looney, ...	Irish, ...	Runner, ...	36	M.	Kingston No. 1, ...		Leg broken and body bruised by flying pieces of coal from blast in cross-cut.
	22	Anthony Lesky, ...	Lithuanian,	Miner, ...	45	M.	Kingston No. 1, ...		Cut and bruised about face and chest by flying coal from premature blast.
	26	James Killgallon, ...	American, ..	Driver, ...	17	S.	Louise, ...		Ribs fractured by being caught between cars in Ross vein.
Sept.	3	Max Ceir, ...	German, ...	Miner, ...	35	M.	East Boston, ...		Head badly cut by a piece of rock falling on him in face of his chamber.
	3	Joe Casterline, ...	Italian, ...	Miner, ...	48	M.	Harry E., ...		Back and side badly bruised by piece of coal from premature blast.
	4	Mick Covall, ...	Slavonian, .	Driver, ...	19	S.	Kingston No. 4, ...		Ankle fractured by being squeezed between cars.
	5	Paul Gayeskey, ...	Polish, ...	Miner, ...	40	M.	Mount Lookout, ...		Three ribs broken and one lung punctured by fall of bony in face of chamber.
	6	John Williams, ...	American, ..	Tracklayer, ...	41	M.	Exeter, ...		Both legs and three ribs broken by fall of coal in Red Ash vein.
	10	Thomas Goldworthy, ..	Irish, ...	Miner, ...	27	M.	Westmoreland, ...		Injured about the stomach and back by fall of rock in face of chamber.
	11	Mike Blozshis, ...	Lithuanian,	Laborer, ...	25	S.	Harry E., ...		Cut on the hip by fall of coal in face of chamber, Red Ash vein.
	13	Silvester Grashunis, ..	Russian, ...	Miner, ...	37	M.	Exeter, ...		Cut about the face and hands by a premature blast in face of his chamber.
	18	Mereno Carpento, ...	Italian, ...	Laborer, ...	22	S.	Mount Lookout, ...		Burned about hands and neck and cut on forehead by an explosion of gas.
	18	Joseph Sopinsky, ...	Polish, ...	Miner, ...	23	S.	Exeter, ...		Burned about face and hands by powder that a spark from his lighted lamp ignited.
	19	Steve Faresh, ...	Slavonian, .	Laborer, ...	37	M.	Kingston No. 1, ...		Bruised on back by a piece of slate falling on him in face of chamber.
	21	Anthony Butske, ...	German, ...	Miner, ...	58	M.	Harry E., ...		Bruised about the body by car running over him in Ross vein.
	27	Costante Sheneski, ...	Polish, ...	Laborer, ...	28	M.	Louise, ...		Leg fractured by a piece of top rock falling on him in face of his chamber.

Oct.	5	Andrew Andish,	Slavonian,	Miner,	32	M.	Kingston No. 4,	Luzerne,	Contusion of the neck by fall of slate in face of his chamber.
	5	Walter Dorowas,	Slavonian,	Miner,	30	S.	Harry E.,		Hands and face slightly burned by an explosion of gas.
	11	George Staparich,	Slavonian,	Miner,	40	M.	Kingston No. 4,		Hands and face burned by an explosion of gas in face of chamber.
	11	S. P. Bellas,	American,	Teamster,	62	M.	Maltby,		Back, left leg and right foot bruised by car wheel falling on him. Outside.
	21	George Dugan,	Polish,	Miner,	34	M.	Stevens,		Rupture of the pelvis. He slipped and fell.
	22	Joseph Pohuskie,	Polish,	Miner,	27	S.	Mount Lookout,		Burned about the face by an explosion of gas in face of chamber.
	23	Joseph Tour,	Slavonian,	Laborer,	22	S.	Harry E.,		Left side of his body injured by being squeezed between car and prop.
	25	Peter Raski,	Polish,	Driver,	22	S.	Kingston No. 1,		Squeezed about the hips by falling under an empty car in Bennett vein.
	26	Charles Levitch,	Lithuanian,	Laborer,	27	S.	Kingston No. 4,		Dislocated hip, caused by a piece of coal falling on him in face of chamber.
	28	Joseph Lewis,	Russian,	Miner,	40	M.	East Boston,		Small bone of ankle broken by a prop falling on him in face of his chamber.
Nov.	1	Albert Perry,	Welsh,	Driver,	20	S.	Kingston No. 3,		Knee sprained by being squeezed between car and brake lever.
	2	John Putpush,	Slavonian,	Laborer,	50	M.	Kingston No. 4,		Fracture of the ankle by being tripped while crossing slope rope.
	8	Ambrose Shepush,	Hungarian,	Laborer,	30	M.	Black Diamond,		Severe cuts on the head and bruised around the body by fall of coal.
	9	Evan Ellis,	Welsh,	Miner,	44	M.	Pettebone,		Right leg fractured below the knee by fall of rock in face of his chamber.
	9	John Shapego,	Austrian,	Driver,	40	M.	Maltby,		Collar bone broken by being squeezed between cars. Outside.
	12	Mark Fuskovitch,	Hungarian,	Driver,	20	S.	Black Diamond,		Contusion of the right leg and shoulder by being caught between cars.
	12	William Ceronza,	Polish,	Laborer,	25	S.	Black Diamond,		Double fracture of the right leg and scalp wounded by falling coal.
	14	Richard Stiles,	English,	Laborer,	30	M.	Forty Fort,		Injured about the hips by flying pieces of coal from a blast.
	18	Charles Shafoots,	Polish,	Miner,	32	M.	Kingston No. 1,		Face and hands burned by an explosion of gas in face of chamber.
	18	Guido Caperoli,	Italian,	Miner,	27	M.	Stevens,		Face burned by powder while making a cartridge.
	19	John Lucash,	Polish,	Laborer,	25	S.	Kingston No. 1,		Nose broken, face and head cut and back injured by fall of rock.
	20	John Ross,	Italian,	Laborer,	21	S.	Kingston No. 4,		Face and neck burned by hot ashes running from a chute. Outside.
	20	John Junebesk,	Polish,	Driver,	22	S.	Kingston No. 1,		Hips squeezed between car and prop. The car jumped the track.
	21	Christ Arkulin,	Austrian,	Patcher,	21	S.	East Boston,		Leg broken below the knee by being caught in belt wheel at empty hoist.
	21	George Zambor,	Austrian,	Miner,	48	M.	Exeter,		Legs broken by fall of rock in face of his chamber, in Red Ash vein.
	25	Joseph Widman,	Lithuanian,	Miner,	32	M.	Harry E.,		Thigh fractured by piece of top rock falling on him in face of his chamber.
	25	John Suboskie,	Russian,	Laborer,	23	S.	Maltby,		Left leg broken by fall of top rock in face of his chamber in Red Ash vein.

TABLE 5.—Continued

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Name of Mine	County	Nature and Cause of Accident in Brief
Dec.	7	Terry Roach,	Irish,	Foot tender,	23	M.	Forty Fort,	Luzerne,	Leg so badly squeezed by cars that it had to be amputated.
	11	Joe Carwaski,	Polish,	Laborer,	44	M.	Kingston No. 1,		Leg broken. Caught between car and road. The car jumped the track.
	19	Joe Grobleck,	Polish,	Laborer,	26	M.	Kingston No. 1,		Fracture of the knee by being bumped by cars in the Orchard vein.
	22	Domnick Bolkus,	Lithuanian,	Laborer,	24	M.	Kingston No. 1,		Head cut, back bruised and arm broken by fall of coal in face of chamber.
	23	John Cology,	Polish,	Miner,	35	M.	Kingston No. 4,		Hands, face and back burned by an explosion of gas in face of his chamber.
	28	Patrick Graven,	Irish,	Miner,	45	M.	Kingston No. 1,		Face, arms and back cut by flying pieces of coal from a premature blast.

FATAL ACCIDENTS

Cars

January 26, James Brennan, American, doortender, age 16 years, was killed at Shaft No. 3, Ross vein, of the Kingston Coal Company. He was going to work in the morning about 7 o'clock and was passing the cars on the empty branch on the rib side. The tender at the foot of the plane signalled the engineer to hoist a loaded trip and as the cars approached the frog, the loaded car struck one of the empty cars, derailing it and throwing it against the rib, just as the boy was passing, and squeezed his head so badly that he died shortly after the accident.

April 4, Anthony Keil, German, laborer, age 48 years, was killed outside at the Forty Fort Colliery of the Temple Iron Company, on the turnout west of the breaker. He was sitting on the track, and the crew on the shifting engine running up empty cars did not see him and ran the cars over his legs. He died shortly after the accident.

June 12, John Jodash, Polish, loader, age 24 years, was killed outside at the Maltby Colliery of the Lehigh Valley Coal Company, near the breaker. He with other men was engaged in unloading condemned coal, when the loader ran down a car from the branch striking the car that the victim was on, knocking him down between the cars.

September 13, Tim Cosinos, Russian, laborer, age 27 years, was killed outside at the No. 2 Breaker of the Kingston Coal Company. He was passing under a car when more cars were run down, bumping the one he was trying to go under, and he was caught by the brake rigging and dragged about twenty feet along the track. His back was broken, and he died shortly after the accident.

September 26, John Petulis, Lithuanian, laborer, age 20 years, was killed at the Black Diamond Colliery (The Peoples' Bank of Wilkes-Barre, Receiver) in the Cooper vein. He was standing on the slope as they were hoisting a loaded car. The rope broke and the car ran back and struck him almost instantly killing him.

November 14, John Rinks, Polish, patcher and doortender, age 19 years, was killed at the Mt. Lookout Colliery of the Temple Iron Company, in the Marcy vein. He was working night shift and was in the habit of jumping on the rear car of a trip that is hauled by an electric motor. After shutting the door it appears that he was trying to catch up to the trip in the dark when four cars uncoupled and ran back against him knocking him down and injuring him so seriously that he died in a short time after the accident.

Premature Blasts

February 22, John Buttenskey, Polish, miner, age 42 years, was killed at the Mt. Lookout Colliery of the Temple Iron Company, in the Marcy vein. He had a hole tamped and lighted the match and went back to a place of safety. Thinking the shot had missed fire he went back to relight it when it went off.

July 30, Leon Wasneck, Polish, miner, age 28 years, was instantly killed at the Westmoreland Colliery of the Lehigh Valley Coal Company, in the Marcy vein. He was in the act of touching the match, and probably touched off the squib instead. His body was badly mangled and was blown a distance of twelve feet across the gangway road.

November 19, Frank Lawrence, Polish, miner, age 22 years, was killed at the Mt. Lookout Colliery of the Temple Iron Company, in the Marcy vein, while in the act of tamping a hole. No one knows how the explosion happened, and the miner in the next chamber only knew that he heard him tamping the hole. It is supposed that he had a mixture of black powder and dynamite with probably a percussion cap. The mixing of the two grades of powder, dynamite and black powder, is very dangerous and ought to be stopped by the companies. They should make their miners use one or the other without mixing them.

Explosions of Gas

April 6, Mike Blazes, Lithuanian, miner, age 40 years, was fatally injured at the Pettebone Colliery of the Delaware, Lackawanna and Western Railroad Company, in the Five Foot vein. He was driving a cross-cut into an abandoned chamber. He fired a blast and evidently broke through and then went up to see what the shot had done, carrying a naked light. When near the face he ignited the gas and he was burned very seriously. He died at the Moses Taylor Hospital.

November 12, William Suzpenas, Lithuanian, miner, age 22 years, was fatally injured at the Harry E. Colliery of the Temple Iron Company, in the Red Ash vein. He was going to his chamber in the morning about 6.30 o'clock and when opposite his chamber in the gangway he claimed he set the gas off. This can hardly be credited, as there was a good current of air where he claimed he set it off. He would have been more likely to find it in the face of his chamber. He died at the Mercy Hospital, November 18.

Powder

January 28, Frank Yamar, Polish, miner, age 29 years, was fatally injured at the Forty Fort Colliery of the Temple Iron Company, while in the act of making up a charge of black powder. He was trying a squib in a blasting tube to see if it was clear, the squib shot out and into a keg of powder that had been left open. He was so badly burned that he died in a week after the accident.

Falling Down Shafts

January 4, Angelo Lucarrelli, Italian, miner, age 32 years, was instantly killed at the Mt. Lookout Colliery, of the Temple Iron Company. He was going home from work and was walking along on the opposite side of the shaft, where men had been forbidden to travel. A door to regulate the ventilation and used as a protection to guard against falling down the shaft, was left open on account of loaded cars standing in the doorway. It could not be shut. The victim squeezed his way between the car and the door frame, which was only a few feet from the shaft opening, and fell down the shaft.

March 8, Frank Shanofoni, Russian, miner, age 22 years, was instantly killed at the Forty Fort Colliery of the Temple Iron Company, by falling down the shaft. This is a mysterious case, as no one seems to know anything about it. He was found dead in the sump at the bottom of the shaft.

June 22, Frank Pereski, Polish, driver, age 20 years, was instantly killed at the Louise Colliery of the Raub Coal Company, by falling down the shaft a distance of 90 feet. He was going up the shaft with a mule car on the carriage, which was against the orders of the foreman. The car not being blocked on the carriage, it partly ran off the end and was caught in the bunton, throwing the victim off to his death.

Miscellaneous

January 30, Charles Derhammer, American, doortender, age 16 years, was fatally injured at the Harry E. Colliery of the Temple Iron Company, in the Red Ash vein. He was working on the night shift attending door and evidently laid down and fell asleep with his lighted lamp hooked on his cap, which set his clothing on fire. He was burned so badly that he died a short while after the accident.

May 25, John Rusnock, Slavonian, foot-tender, age 25 years, was killed at the Harry E. Colliery of the Temple Iron Company. He was employed as a foot-tender at the shaft and was considered the head footman. He put a loaded car on the carriage and gave the usual signal to hoist, as another car was coming towards the foot. He thought it was going to run on him and probably getting excited jumped on the loaded carriage as it started to go up. He was caught between the carriage and one of the buntons, or edge of the shaft, and squeezed so badly that he died from the effects.

September 16, Wrighter Hill, American, boss loader, age 32 years, was killed at the Maltby Colliery of the Lehigh Valley Coal Company. He was in under the breaker giving instructions to his helpers and was coming out, when one of the employes working in the upper part of the breaker threw an elevator bucket out of the window and it struck him on the head, crushing his skull. He died very soon after the accident.

December 20, Frank Shemonis, Polish, laborer, age 40 years, was instantly killed at the Mt. Lookout Colliery of the Temple Iron Company, in the Red Ash vein. He was going home from work off the night shift and jumped on the electric motor to take a ride to the bottom of the shaft. The motor runner ordered him off as it was against the rules of the company to allow any one to ride on the motor except the crew that runs it. He was getting off on the side opposite the one where he got on and came in contact with the trolley wire and was instantly killed by the shock.

CONDITION OF COLLIERIES

KINGSTON COAL COMPANY

Kingston No. 1 Shaft.—Ventilation, drainage and general condition as to safety good, excepting in a portion of the Orchard vein where the drainage is poor.

No. 2 Shaft.—General condition fair.

No. 3 Shaft.—General condition very good.

No. 4 Shaft.—General condition good.

No. 2 Slope.—Ventilation fair, drainage in Ross vein poor in some places. Condition as to safety good.

TEMPLE IRON COMPANY

Mount Lookout Colliery.—General condition good.

Forty Fort Colliery.—Ventilation and drainage fair.

Harry E. Colliery.—General condition very good.

LEHIGH VALLEY COAL COMPANY

Exeter Colliery.—General condition as to safety good.

Maltby Colliery.—General condition as to safety good.

Westmoreland Colliery.—Ventilation very much improved. General condition good.

CLEAR SPRING COAL COMPANY

Clear Spring Colliery.—General condition as to safety good.

STEVENS COAL COMPANY

Stevens Colliery.—Has been very much improved. General condition good.

PEOPLES' BANK OF WILKES-BARRE, RECEIVER

Black Diamond Colliery.—Ventilation and drainage fair.

RAUB COAL COMPANY

Louise Colliery.—Ventilation and drainage fair.

EAST BOSTON COAL COMPANY

East Boston Colliery.—General condition good.

DELAWARE, LACKAWANNA AND WESTERN RAILROAD COMPANY

Pettebone Colliery.—Ventilation and drainage very good.

TROY COAL COMPANY

Troy Colliery.—Ventilation very much improved. General condition as to safety good.

DUNN COAL COMPANY

Mountain Top Colliery.—Ventilation, drainage and general condition as to safety good.

IMPROVEMENTS

KINGSTON COAL COMPANY

Kingston No. 2 Colliery.—Great attention has been given to the development of the water level coal in the mountain district.

Four tunnels have been driven from the surface cutting through the Ross and Red Ash veins.

A new coal road 3,000 feet long, also a self-acting plane connecting these tunnels to the main haulage road to No. 2 breaker.

A new concrete crib has been substituted for the wooden timbers at the permanent opening of No. 2 Slope.

450 H. P. return tubular B. and W. boilers have been installed at the old slope, and are enclosed in a corrugated iron-brick house.

Three tunnels have been completed in the Old Slope district between the Ross and Red Ash veins.

A new addition has been built to the east side of No. 2 breaker, new shakers taking the place of revolving screens.

A new 8 inch wooden pipe line 2,000 feet long connecting No. 3 shaft with No. 2 breaker.

A new system of fire protection and electric light.

A new washery has been erected independent of the breaker.

Kingston No. 4 Colliery.—Two new tunnels between the Bennett and Checker veins.

An additional pump and bore hole completed to Central pumping plant in Bennett vein.

A new 8x25 foot fan and expanded metal-concrete casing and house for same are in course of construction and will soon be completed.

300 H. P. return tubular B. and W. boilers added to main boiler plant.

The electric power plant has been increased by the addition of two 240 K. W. direct driven generators, new brick house enclosing same.

A number of changes and additions made to the breaker.

New addition to warehouse.

Through the generosity of the company a free library has been opened for the use of the employes, where they can spend their evenings in reading and studying. No books or magazines of a sectarian nature will be allowed in the library. Everything is free. Lectures are given on the "first aid to the injured" by Doctor Lake once a month. Also lectures are given on mining questions once or twice a month.

TEMPLE IRON COMPANY

Mount Lookout Colliery.—The wooden cribbing in the Mount Lookout shaft, which is 14x22 feet, and 110 feet from the surface to top of rock, became partially decayed to a depth of 50 feet, which is the low water mark. The cribbing below this level is constantly wet and consequently well preserved. The problem of renewing this cribbing without a lengthy suspension of work was a serious one, owing to the nature of the surrounding wash, which is composed largely of quicksand. It was decided to recrib the shaft with steel inside of the old crib, removing that part of the cribbing that was decayed.

The steel cribbing is composed of sets of 12 inch steel channels, 20½ lbs. per foot, placed horizontally, with the web of flat side towards the timber and the flanges projecting into the shaft. These channels are bolted flange to flange every two feet by ¾ inch bolts.

The channels across the end of the shaft, 14 feet long, are in one piece; the channels running lengthwise of the shaft are in three pieces, being divided by vertical plates ¼ inch thick, 12 inches wide and 3 feet high. Connections were made by corner angle plates. The vertical plates are set in the centre lines between the compartments, the shaft having two hoistways and an airway, and engage the buntons, which are composed of 6 inch ship channels, 15 pounds per foot, set in pairs with the webs against the vertical plates and bolted to them. The buntons are spaced 36½ inches, and those between the hoistway and airway have an angle iron riveted to them to carry the wooden brattice of the airway. The cribbing is strengthened longitudinally by steel plates, ½″x7″, placed between the flanges of the channels and extending back into the old timber crib. These stiffening rings were placed 3 feet apart. As the steel work was put in place the irregular space behind it, due to the removal of decayed wood, was filled with a strong cement grout, and, where the space was large enough, by concrete made of small broken stone.

The entire steel work was painted with graphite paint after it was placed in position. The depth of the steel cribbing is 52 feet from the top of the shaft.

The steel and the tools necessary for the erection of same were furnished by the York Bridge Company, who also furnished and erected over this shaft a steel tower, 56 feet high from foundation to center of sheaves, to replace the old wooden tower.

The time required to complete this work was one month. The colliery suspended work the last day of June and resumed work the first day of August.

LEHIGH VALLEY COAL COMPANY

Exeter Colliery.—A new gravity plane with second opening was driven in east district Red Ash to Babylon vein.

The high pressure air motor haulage has been extended a considerable distance.

In order to centralize the drainage a 4 inch bore hole was driven from the Marcy to Red Ash vein. This water is now handled by the Central pumping plant located in Red Ash vein.

Main east gangway in Checker vein re-opened for mining, and haulage engines installed.

A brick structure has been erected east of the high pressure boiler plant for the purpose of installing therein an additional high pressure air compressor, together with a 10 foot Sturdevant fan, boiler feed pumps and heater.

An 8 inch ash bore has been driven to the Checker vein. The ashes from the fires are now run by gravity to this hole, through which they are carried into the old workings of the Checker vein.

The new breaker erected in place of the one destroyed by the cyclone October 27, 1906, was put in operation during the latter part of January.

The arrangement of preparation in the new breaker differs considerably from that of the old, and the results have proven very satisfactory.

Maltby Colliery.—New head frame for No. 1 Shaft and re-arrangement of tracks completed.

Extensive repairs to breaker progressing.

New rock crusher was installed at a point near the breaker for the purpose of silting the rock into the old workings of the Marcy vein.

Series of test holes are being continued to prove the safe working rock covering over the Pittston and 4 Foot vein.

Completed one concrete steel overcast.

Improvements and provings in all veins progressing.

Westmoreland Colliery.—Series of test holes have been continued to prove the safe working rock cover over Pittston vein.

New bore hole to Marcy vein for electric cable.

New 250 K. W. generator for lighting and inside haulage installed.

New 16x24 engine for bore hole slope in Pittston vein.

Extensive changes and repairs have been made to breaker.

In order to prepare properly the smaller sizes part of this product is prepared in the wet state. For this purpose the column line from the Central pumping plant has been extended to the top of the breaker.

Several drainage holes have been driven from Pittston to Marcy vein.

Head of inside slope extended.

Trolley wires and tracks for electric haulage nearly completed.

In the Marcy vein, grading and retracking for electric haulage.

Gangways and travelingways in all veins examined carefully every day.

STEVENS COAL COMPANY

Stevens Colliery.—During the year they installed a duplicate of the 300 H. P. Maxim boiler that they bought in 1904. In erecting this boiler they abandoned the 10 foot span arch in the fire box, and are using two smaller arches instead.

They also started work on, and nearly completed an arrangement for taking all the coal from the head of the new shaft to the breaker, by means of a haulage system which will carry the coal through the culm bank through a deep cut that they made in it, to a point about 100 feet north of the Lehigh Valley tracks, running under the breaker, where the coal will be dumped into a 10x36 endless conveyor, which will carry it to the head of the breaker.

They also placed on concrete foundation a 14x20 3″ pine tank, 30,000 gallon capacity, for supplementary water supply for their boiler plant.

A tunnel was driven from the Red Ash vein to the Fifth vein, to extend the workings in the western part of the property.

RAUB COAL COMPANY

Louise Colliery.—Rock tunnel at Mount Thomas from Ross to Red Ash seams, 271 feet long. One plane at Mount Thomas in Red Ash seam, 1175 feet long. New boiler plant at breaker. Two Maxim boilers 300 H. P. each.

DELAWARE, LACKAWANNA AND WESTERN RAILROAD COMPANY

Pettebone Colliery.—The work of installing a Jeanesville steam pump, 20x7½x24, in Baltimore vein in concrete and steel pump room is now under way.

A rock tunnel has been driven from the Cooper vein to Five Foot vein, north of No. 2 Shaft, which will be used for developing and transportation.

The work of driving a rock tunnel from Cooper vein to Five Foot vein, west of No. 2 Shaft, on a 15 degree pitch, is now under way.

When these seams are fully developed they expect an enormous increase in the tonnage, which has been exceedingly low for the past year.

The conditions have also changed to enable them to mine the Hillman vein, south east of No. 1 Shaft.

DUNN COAL COMPANY

Mountain Top Colliery.—A new breaker has been erected and equipped with all necessary machinery, and an office, powder house, boiler room and blacksmith house have also been built.

They have opened the mine with two slopes.

Ninth District

LUZERNE COUNTY

Wilkes-Barre, Pa., February 20, 1908.

Hon. James E. Roderick, Chief of Department of Mines:

Sir: I have the honor to transmit herewith my annual report as Inspector of Mines for the Ninth Anthracite District, for the year ending December 31, 1907. The report gives the statistical information as required by law, and also a brief description of the fatal and non-fatal accidents that occurred during the year.

Respectfully submitted,

D. T. DAVIS,

Inspector.

SUMMARY OF STATISTICS

Number of collieries,	15
Number of mines,	25
Number of mines in operation,	25
Number of tons of coal shipped to market,	4,324,284
Number of tons used at mines for steam and heat,	358,457
Number of tons sold to local trade and used by employes,	61,764
Number of tons produced,	4,744,505
Number of tons produced by electrical machines,	——
Number of tons produced by compressed air machines,	——
Number of persons employed inside of mines,	6,991
Number of persons employed outside,	2,326
Number of fatal accidents inside of mines,	38
Number of fatal accidents outside,	3
Number of non-fatal accidents inside of mines,	72
Number of non-fatal accidents outside,	4
Number of tons of coal produced per fatal accident inside,	124,855
Number of persons employed per fatal accident inside,	184
Number of persons employed per fatal accident outside,	775
Number of persons employed per non-fatal accident inside,	97
Number of persons employed per non-fatal accident outside,	582
Number of wives made widows,	22
Number of children orphaned,	67
Number of steam locomotives used inside of mines,	1
Number of steam locomotives used outside,	4
Number of compressed air locomotives used inside,	3
Number of electric motors used inside,	15
Number of fans in use,	30
Number of gaseous mines in operation,	23
Number of non-gaseous mines in operation,	2
Number of new mines opened,	1
Number of old mines abandoned,	1

TABLE A

PRODUCTION OF COAL

Names of Operators	Tons
Lehigh and Wilkes-Barre Coal Company,	1,299,647
Delaware, Lackawanna and Western Railroad Company,	1,233,516
Delaware and Hudson Company,	1,140,910
Parrish Coal Company,	556,991
Plymouth Coal Company,	174,302
Kingston Coal Company,	151,093
George F. Lee Coal Company,	67,281
North American Coal Company,	71,296
West Nanticoke Coal Company,	46,233
Christian and Dainty Coal Company,	3,236
Total,	4,744,505

Production by Counties

Luzerne,	4,744,505

TABLE B.—Fatal and non-fatal accidents inside and outside of mines; number of tons of coal produced per accident; number of persons employed; number employed per accident

Names of Operators	Fatal Accidents			Non-fatal Accidents			Tons of coal produced per fatal accident inside	Tons of coal produced per non-fatal accident inside	Number of employes inside	Number of employes outside	Total number of employes	Number of employes inside per fatal accident	Number of employes outside per fatal accident	Number of employes inside per non-fatal accident	Number of employes outside per non-fatal accident
	Inside	Outside	Total	Inside	Outside	Total									
Lehigh and Wilkes-Barre Coal Co.,	9	....	9	24	1	25	144,405	54,152	1,504	476	1,980	167	....	63	476
Delaware and Hudson Co.,	8	1	9	24	1	25	142,614	47,538	1,906	705	2,611	238	705	80	705
Delaware, Lackawanna and Western Railroad Co.,	10	....	10	9	1	10	123,352	137,057	1,832	366	2,198	183	....	204	366
Parrish Coal Co.,	6	1	7	7	....	7	92,832	79,570	1,033	370	1,403	172	370	148	....
Plymouth Coal Co.,	3	....	3	3	....	3	58,101	58,101	295	131	426	98	....	98	....
Kingston Coal Co.,	1	....	1	1	1	2	151,093	151,093	256	115	371	256	....	256	115
George F. Lee Coal Co.,	1	1	2	4	....	4	67,281	16,820	152	60	212	152	60	38	....
Miscellaneous companies,	....	....	....	....	....	....	....	....	13	103	116	....	....	....	....
Totals and averages for district,	38	3	41	72	4	76	124,855	65,896	6,991	2,326	9,317	184	775	97	582

TABLE C.—Classification of Fatal Accidents Inside and Outside of Mines

	Months													
	January	February	March	April	May	June	July	August	September	October	November	December	Totals	Percentages
Causes of Accidents Inside														
Falls of coal,	4	....	2	....	....	....	1	2	....	....	1	....	10	26.32
Falls of roof,	1	2	1	....	....	1	1	....	2	....	....	....	8	21.05
Mine cars,	....	2	....	1	....	....	2	....	....	1	1	....	7	18.42
Explosions of gas and dust,	1	....	3	....	....	....	....	....	....	....	....	....	4	10.53
Premature blasts,	1	....	1	1	....	2	....	....	....	1	....	....	6	15.79
Mules,	1	....	....	....	....	....	....	....	....	....	....	....	1	2.63
Miscellaneous,	....	....	....	....	....	....	....	....	....	1	1	....	2	5.26
Totals,	8	4	7	2	....	3	4	2	2	3	3	....	38	100.00
Causes of Accidents Outside														
Cars,	....	....	....	....	....	....	....	....	....	2	....	....	2	66.66
Machinery,	....	....	1	....	....	....	....	....	....	....	....	....	1	33.34
Totals,	....	....	1	....	....	....	....	....	....	2	....	....	3	100.00
Grand totals inside and outside,	8	4	8	2	....	3	4	2	2	5	3	....	41	

TABLE D.—Classification of Non-fatal Accidents Inside and Outside of Mines

	Months													
	January	February	March	April	May	June	July	August	September	October	November	December	Totals	Percentages
Causes of Accidents Inside														
Falls of coal,	1	....	1	....	....	1	2	....	....	....	3	....	8	11.11
Falls of slate,	1	....	....	....	....	....	1	2	....	....	....	....	4	5.56
Falls of roof,	1	....	....	....	....	....	1	3	....	2	....	1	8	11.11
Mine cars,	2	....	5	....	....	3	....	1	1	....	....	....	12	16.67
Explosions of gas and dust,	1	2	1	4	....	2	3	1	2	2	3	1	22	30.55
Premature blasts,	....	....	1	....	....	....	....	1	....	1	....	1	4	5.56
Miscellaneous,	3	....	1	....	4	....	1	....	....	2	3	....	14	19.44
Totals,	9	2	9	4	4	6	8	8	3	7	9	3	72	100.00
Causes of Accidents Outside														
Boiler explosions,	....	....	....	....	....	....	....	....	....	....	....	2	2	50.00
Miscellaneous,	...	....	....	....	1	....	....	....	....	....	....	1	2	50.00
Totals,	....	....	....	....	1	....	....	....	....	....	....	3	4	100.00
Grand totals inside and outside,	9	2	9	4	5	6	8	8	3	7	9	6	76	

TABLE E.—Occupations of Persons Killed or Fatally Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Inside													
Miners,	5	1	4	1	....	3	1	....	1	2	1	....	19
Miners' laborers,	2	2	....	1	....	....	1	2	1	....	....	....	9
Drivers and runners,	....	....	....	....	....	....	....	....	....	1	....	....	1
Doorboys and helpers,	1	1	....	....	....	....	1	....	....	....	....	....	3
Company men,	....	....	3	....	....	....	1	....	....	....	2	....	6
Totals,	8	4	7	2	....	3	4	2	2	3	3	....	38
Outside													
Slatepickers (boys),	....	....	1	....	....	....	....	....	...	....	....	....	1
All other employes,	....	....	....	....	....	....	....	....	....	2	....	....	2
Totals,	....	....	1	....	....	....	....	....	....	2	....	....	3
Grand totals inside and outside,	8	4	8	2	....	3	4	2	2	5	3	....	41

TABLE F.—Occupations of Persons Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Inside													
Assistant mine foremen,	....	...	....	....	...	1	....	....	...	....	...	....	1
Miners,	6	....	4	2	2	....	4	5	....	4	6	2	35
Miners' laborers,	....	1	....	2	1	3	4	2	2	2	2	1	20
Drivers and runners,	....	1	2	....	1	1	....	1	1	....	1	....	8
Doorboys and helpers,	1	....	....	....	....	....	....	....	....	....	....	....	1
Company men,	2	...	3	....	...	1	...	...	...	....	...	....	6
All other employes,	....	....	....	....	....	....	....	....	....	1	....	....	1
Totals,	9	2	9	4	4	6	8	8	3	7	9	3	72
Outside													
Slatepickers (boys),	....	....	....	....	....	....	....	....	....	....	....	1	1
All other employes,	....	....	....	....	1	....	....	....	....	....	....	2	3
Totals,	....	....	....	....	1	....	....	....	....	....	....	3	4
Grand totals inside and outside,	9	2	9	4	5	6	8	8	3	7	9	6	76

TABLE G.—Nationality of Persons Killed or Fatally Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
American,	....	1	2	....	....	....	1	....	1	1	....	....	6
English,	....	....	....	....	....	....	....	....	....	....	1	....	1
Welsh,	....	....	2	....	....	....	....	....	....	....	....	....	2
Irish,	....	....	1	1	....	1	....	....	....	1	1	....	5
German,	1	....	....	....	....	....	....	....	1	....	....	....	2
Polish,	3	1	1	1	....	1	1	2	....	2	....	....	12
Slavonian,	1	....	1	....	....	1	....	....	....	....	1	....	4
Lithuanian,	3	2	1	....	....	....	....	....	....	....	....	....	6
Austrian,	....	....	....	....	....	....	1	....	....	....	....	....	1
Russian,	....	....	....	....	....	....	1	....	....	1	....	....	2
Totals,	8	4	8	2	....	3	4	2	2	5	3	....	41

TABLE H.—Nationality of Persons Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
American,	2	1	7	....	2	....	1	2	1	1	1	3	21
English,	....	....	....	....	....	....	....	1	....	1	1	....	3
Welsh,	2	....	....	....	....	2	1	....	....	....	....	....	5
Irish,	....	....	....	....	....	....	....	....	....	1	....	....	1
German,	1	....	....	....	....	1	1	....	....	....	1	....	4
Polish,	2	....	2	1	1	2	3	2	1	....	2	....	16
Slavonian,	1	....	....	1	1	....	....	....	....	1	....	....	4
Lithuanian,	1	1	....	2	1	1	....	1	...	1	2	2	12
Austrian,	....	....	....	....	....	....	1	1	....	....	1	1	4
Russian,	....	....	....	....	....	....	1	1	1	2	1	....	6
Totals,	9	2	9	4	5	6	8	8	3	7	9	6	76

TABLE I.—Operators and mines, kind of openings, type and size of fans, size of furnaces, volume of air produced by fan or furnace per minute, number of splits of air currents, and number of persons employed inside

Names of Operators and Mines	Kind of opening	Gaseous or non-gaseous	Method of ventilation	Diameter of fan in feet	Width of blades in feet	Depth of blades in feet	Number of revolutions per minute	Water gauge developed—in inches	Name of fan	Power used	Number of splits of air currents	Number of cubic feet of air per minute entering the mine at inlet	Total quantity of air per minute circulating in all the splits in cubic feet	Number of persons employed inside
Lehigh and Wilkes-Barre Coal Co.														
Nottingham No. 15, 4 shafts, ...	Shaft,..	Gaseous,..	Fan,...	24	7.10	6	78	2.1	Guibal, ...	Steam, ..	9	324,000	259,000	723
				24	8	6	76	2.0						
				24	8	6	77	1.7						
				24	8	6	78	2.2						
				24	8	6	78	1.7						
Lance No. 11, 3 shafts, ...	Shaft,..	Gaseous,..	Fan,...	34.3	10.11	8.4½	49	2.0	Guibal, ...	Steam, ..	16	313,060	207,150	569
				35.0	11.9	8.9	43	2.0						
				35.0	11.9	8.9	44	2.1						
Reynolds No. 16, ...	Slope,....	Gaseous,..	Fan,.....	23.9	5.7	5.10½	75	1.0	Guibal, ...	Steam, ..	5	100,600	53,800	212
Delaware, Lackawanna and Western Railroad Co.														
Woodward, 3 shafts, ...	Shaft,..	Gaseous,..	Fan,...	16	5.0	6.3	105	1.6	Dickson Open,..	Steam,	25	365,000	306,000	1,313
				16	5.8	6.3	105	1.6	Dickson Closed,	Steam,				
				20	6.0	6.0	95	1.8	Dickson Closed,	Steam,				
				35	9.0	10	49	2.4	Dickson Closed.	Steam,				
Avondale, 2 shafts, ...	Shaft,....	Gaseous,...	Fan,...	16	5	4	102	1.0	Dickson Open,	Steam, ..	10	191,000	165,000	519
				16	5	4	108	2.1						
Delaware and Hudson Co.														
Boston, ...	Drift,....	Non-gas.,.	Fan,.....	22	5	6.6	75	1.8	Guibal, ...	Steam, ..	9	262,000	215,000	391

Plymouth Colliery:														
Plymouth No. 3,	Shaft,	Gaseous,	Fan,	28	10	7.6	60	2	Guibal,	Steam,	10	324,000	284,000	613
	Drift,	Gaseous,	Fan,	17	5	4	90	1.2						
	Slope,	Gaseous,	Fan,	17	5	4	40	.2						
Plymouth No. 2, 2 shafts,	Shaft,	Gaseous,	Fan,	28	10	7.6	71	3.4	Guibal,	Steam,	13	224,000	206,000	428
	Shaft,	Gaseous,	Fan,	22	5	6.6	80	2.1						
Plymouth No. 4,	Shaft,	Gaseous,	Fan,	17	5	4	120	.8	Guibal,	Steam,	4	78,000	71,000	173
Plymouth No. 5,	Shaft,	Gaseous,	Fan,	22.6	5	6.6	75	1.8	Guibal,	Steam,	8	136,000	112,000	301
Parrish Coal Co.														
Parrish,	Slope,	Gaseous,	Fan,	24	8.0½	7.4	70	......	Guibal,	Steam,	10	159,000	106,900	470
	Slope,	Gaseous,	Fan,	20	5.8	5.8	80	2.1						
Buttonwood,	Shaft,	Gaseous,	Fan,	35	11.9	10.8	49	2	Auxiliary Guibal,	Steam,	21	338,000	246,975	563
			Fan,	24	8.0½	7.4	70	......						
			Fan,	20	5.8	5.8	80	......						
Plymouth Coal Co.														
Dodson,	Shaft,	Gaseous,	Fan,	20	6.6	5.6	85	2.2	Guibal,	Steam,	6	105,000	100,000	295
Kingston Coal Co.														
Gaylord,	Slope,	Gaseous,	Fan,	25	8	7	60	1.1	Guibal,	Steam,	5	66,000	28,000	256
George F. Lee Coal Co.														
Chauncey,	Slope,	Non-gas.,	....	....	....	....	......	......	....	....	3	44,000	32,000	152

TABLE 1.—Operators, location of collieries, railroads, etc.

Names of Operators and Collieries	County	Name of General Superintendent	Post Office	Name of Superintendent	Post Office	Railroad to Mine
Lehigh and Wilkes-Barre Coal Co.						
Nottingham No. 15, Lance No. 11, Reynolds No. 16,	Luzerne,	C. F. Huber,	Wilkes-Barre,	Morgan R. Morgans, Inside, W. H. Herring, Outside,	Wilkes-Barre,	C. R. R. of N. J.
Delaware, Lackawanna and Western Railroad Co.						
Woodward, Avondale,	Luzerne,	R. A. Phillips,	Scranton,	Henry G. Davis,	Kingston,	D. L. and W.
Delaware and Hudson Co.						
Boston, Plymouth Nos. 2, 3, 4 and 5,	Luzerne,	C. C. Rose,	Scranton,	E. R. Pettebone,	Dorranceton,	Delaware and Hudson
Parrish Coal Co.						
Parrish, Buttonwood,	Luzerne,	H. H. Ashley,	Wilkes-Barre,	Thomas R. Evans,	Plymouth,	C. R. R. of N. J.
Plymouth Coal Co.						
Dodson,	Luzerne,	James B. Davis,	Plymouth,			D. L. and W.
Kingston Coal Co.						
Gaylord,	Luzerne,	F. E. Zerby,	Wilkes-Barre,	Ralph Smith,	Wilkes-Barre,	Delaware and Hudson
George F. Lee Coal Co.						
Chauncey,	Luzerne,	George F. Lee,	Wilkes-Barre,			D. L. and W.
Christian and Dainty Coal Co.						
Hillside,	Luzerne,	Christian and Dainty,	Plymouth,			Delaware and Hudson
West Nanticoke Coal Co.						
West Nanticoke Washery,	Luzerne,	A. D. W. Smith,	Wilkes-Barre,			Pennsylvania
North American Coal Co.						
Plymouth Washery,	Luzerne,	H. W. Samms,	Wilkes-Barre,			C. R. R. of N. J.

TABLE 2.—Number of tons of coal mined, number of days worked, number of persons employed, number killed and injured, quantity of powder and dynamite used, etc.

Names of Operators and Collieries	County	Number of tons of coal shipped to market	Number of tons used at collieries for steam and heat	Number of tons sold to local trade and used by employes	Total production of coal in tons	Number of days worked	Number of employes	Number of fatal accidents	Number of non-fatal accidents	Number of kegs of powder used	Number of pounds of dynamite used	Number of horses and mules
Lehigh and Wilkes-Barre Coal Co.												
Nottingham No. 15,	Luzerne,	614,313	49,962	4,391	668,666	245	913	7	15	12,871	11,062	114
Lance No. 11,		428,141	29,930	2,670	460,741	237	745	2	9	13,762	38,277	115
Reynolds No. 16,		152,445	17,795	....	170,240	224	322	.....	1	2,804	3,197	68
Totals,		1,194,899	97,687	7,061	1,299,647	....	1,980	9	25	29,437	52,536	297
Delaware, Lackawanna and Western Railroad Co.												
Woodward,	Luzerne,	849,077	53,216	5,875	908,168	254	1,575	8	7	26,595	10,854	134
Avondale,		290,294	33,050	2,004	325,348	250	623	2	3	6,610	5,266	56
Totals,		1,139,371	86,266	7,879	1,233,516	....	2,198	10	10	33,205	16,120	190
Delaware and Hudson Co.												
Boston,	Luzerne,	270,820	15,804	....	286,624	184	539	1	3	9,104	1,783	67
Plymouth No. 2,		96,744	28,552	....	125,296	92	600	1	8	3,425	920	55
Plymouth No. 3,		371,534	25,078	4,560	401,172	248	780	3	6	11,199	4,511	98
Plymouth No. 4,*		....	....	....	....	....	205	1	4	2,989	996	42
Plymouth No. 5,		296,781	25,433	5,604	327,818	169	487	3	4	5,383	1,584	41
Totals,		1,035,879	94,867	10,164	1,140,910	....	2,611	9	25	32,100	9,794	303

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*Coal taken through Plymouth No. 5 breaker.

TABLE 2.—Continued

Names of Operators and Collieries	County	Number of tons of coal shipped to market	Number of tons used at collieries for steam and heat	Number of tons sold to local trade and used by employes	Total production of coal in tons	Number of days worked	Number of employes	Number of fatal accidents	Number of non-fatal accidents	Number of kegs of powder used	Number of pounds of dynamite used	Number of horses and mules
Parrish Coal Co.												
Parrish, ...	Luzerne, ...	213,867	18,000	8,418	240,285	222	650	4	4	6,251	94,475	93
Buttonwood, ...		287,694	18,000	11,012	316,706	219	753	3	3	11,023	38,200	127
Totals, ...	....	501,561	36,000	19,430	556,991	....	1,403	7	7	17,274	132,675	220
Plymouth Coal Co.												
Dodson, ...	Luzerne, ...	149,124	20,000	5,178	174,302	196	426	3	3	2,204	3,850	35
Kingston Coal Co.												
Gaylord, ...	Luzerne, ...	140,059	7,437	3,597	151,093	227	371	1	2	5,404	3,125	50
George F. Lee Coal Co.												
Chauncey, ...	Luzerne, ...	56,469	8,760	2,052	67,281	216	212	2	4	783	3,800	23
North American Coal Co.												
Plymouth Washery, ...	Luzerne, ...	60,375	5,075	5,846	71,296	....	56	......	......	....	....	3
West Nanticoke Coal Co.												
West Nanticoke Washery, ...	Luzerne, ...	43,547	2,215	471	46,233	....	29	......	......	....	....	....
Christian and Dainty Coal Co.												
Hillside, ...	Luzerne, ...	3,000	150	86	3,236	55	31	......	......	100	....	3
Grand totals, ...	....	4,324,284	358,457	61,764	4,744,505	....	9,317	41	76	120,507	221,900	1,124

TABLE 2.—Part 2

Names of Operators	County	Number of Boilers					Locomotives			Number of steam engines of all classes	Total horse power	Number of pumps delivering water to surface	Capacity in gallons per minute	Quantity delivered to surface per minute—gallons	Number of electric dynamos	Number of air compressors
		Cylindrical	Horse power	Tubular	Horse power	Total horse power	Steam	Air	Electric							
Lehigh and Wilkes-Barre Coal Co.,	Luzerne,	6	396	24	5,288	5,684	2	3	......	117	7,918	4	5,620	3,600	......	7
Delaware, Lackawanna and Western Railroad Co.		......	....	20	4,375	4,375	3	......	15	53	6,018	6	10,600	4,300	4	......
Delaware and Hudson Co.,		123	3,421	12	2,600	6,021	......	......	......	191	12,590	9	12,200	3,650	2	6
Parrish Coal Co.,		18	720	26	3,900	4,620	......	......	......	48	8,191	2	2,167	1,452	......	6
Plymouth Coal Co.,		......	....	14	2,100	2,100	......	......	......	12	1,500	8	2,100	1,500	1	2
Kingston Coal Co.,		......	....	3	900	900	......	......	......	11	900	1	400	400	......	1
George F. Lee Coal Co.,		......	....	4	400	400	......	......	......	4	300	....	....	....	......	......
West Nanticoke Coal Co.,		......	....	3	250	250	......	......	......	5	200	1	800	800	......	......
North American Coal Co.,		......	....	6	560	560	......	......	......	....	....	....	....	....	......	......
Christian and Dainty Coal Co.,		......	....	2	120	120	......	......	......	2	50	1	200	50	......	......
Totals,	....	147	4,537	114	20,493	25,030	5	3	15	443	37,667	32	34,087	15,752	7	22

TABLE 3.—Number of each class of employes inside and outside of mines

Names of Operators and Collieries	County	Inside											Outside									
		Mine foremen	Assistant mine foremen	Fire bosses and assistants	Miners	Miners' laborers	Drivers and runners	Doorboys and helpers	Pumpmen	Company men	All other employes	Total inside	Superintendents	Foremen	Blacksmiths and carpenters	Engineers and firemen	Slatepickers (boys)	Slatepickers (men)	Bookkeepers and clerks	All other employes	Total outside	Grand total inside and outside
Lehigh and Wilkes-Barre Coal Co.																						
Nottingham No. 15,	Luzerne,	1	2	8	295	187	75	21	7	83	44	723	....	1	12	29	39	10	4	95	190	913
Lance No. 11,		1	1	7	210	155	60	32	5	84	14	569	....	1	6	30	64	10	3	62	176	745
Reynolds No. 16,		1	1	2	49	71	33	7	......	48	......	212	....	1	3	14	41	4	2	45	110	322
Totals,		3	4	17	554	413	168	60	12	215	58	1,504	....	3	21	73	144	24	9	202	476	1,980
Delaware, Lackawanna and Western Railroad Co.																						
Woodward,	Luzerne,	3	2	11	427	461	91	46	9	263	......	1,313	....	2	24	23	30	8	4	171	262	1,575
Avondale,		1	1	4	137	165	60	16	7	......	128	519	....	1	5	17	24	......	1	56	104	623
Totals,		4	3	15	564	626	151	62	16	263	128	1,832	....	3	29	40	54	8	5	227	366	2,198
Delaware and Hudson Co.																						
Boston,	Luzerne,	1	1	3	109	152	54	12	2	49	8	391	....	1	6	14	42	22	2	61	148	539
Plymouth No. 2,		1	1	4	138	119	45	24	5	73	18	428	....	1	6	24	45	23	2	71	172	600
Plymouth No. 3,		1	1	4	216	202	86	36	......	58	9	613	....	1	6	22	34	48	2	54	167	780
Plymouth No. 4,		1	1	1	52	46	24	7	2	28	11	173	....	1	2	9	......	......	......	20	32	205
Plymouth No. 5,		1	1	2	96	79	44	6	1	61	10	301	....	1	7	15	51	43	2	67	186	487
Totals,		5	5	14	611	598	253	85	10	269	56	1,906	....	5	27	84	172	136	8	273	705	2,611

Parrish Coal Co.																						
Parrish,	Luzerne,	1	2	5	154	118	51	28	4	107	......	470	2	2	7	18	31	52	6	62	180	650
Buttonwood,		1	2	6	175	158	63	26	4	128	......	563	2	2	9	22	38	38	4	75	190	753
Totals,		2	4	11	329	276	114	54	8	235	......	1,033	4	4	16	40	69	90	10	137	370	1,403
Plymouth Coal Co.																						
Dodson,	Luzerne,	1	1	3	77	75	50	14	6	46	22	295	1	1	7	23	33	......	2	64	131	426
Kingston Coal Co.																						
Gaylord,	Luzerne,	2	....	....	82	85	34	2	1	10	40	256	1	1	14	9	20	4	1	65	115	371
George F. Lee Coal Co.																						
Chauncey,	Luzerne,	1	1	1	30	54	8	......	......	48	9	152	....	1	3	4	20	11	1	20	60	212
North American Coal Co.																						
Plymouth Washery,	Luzerne,	....	....	....	......	......	......	......	......	......	......	......	....	1	2	9	8	......	1	35	56	56
West Nanticoke Coal Co.																						
West Nanticoke Washery,	Luzerne,	....	....	....	......	......	......	......	......	......	......	......	....	1	1	5	4	4	1	13	29	29
Christian and Dainty Coal Co.																						
Hillside,	Luzerne,	1	....	....	5	5	1	......	......	1	......	13	....	....	2	2	8	......	1	5	18	31
Grand totals,		19	18	61	2,252	2,132	779	277	53	1,087	313	6,991	6	20	122	289	532	277	39	1,041	2,326	9,317

TABLE 3.—Part 2

Names of Operators and Collieries	County	Number of Days Worked in Breaker												
		January	February	March	April	May	June	July	August	September	October	November	December	Total
Lehigh and Wilkes-Barre Coal Co.														
Nottingham No. 15,	Luzerne,	21	21	20	23	23	18	20	19	21	16	20	23	245
Lance No. 11,		18	19	18	22	22	20	19	18	19	16	24	22	237
Reynolds No. 16,		20	19	18	20	21	20	17	18	16	14	21	20	224
Delaware, Lackawanna and Western Railroad Co.														
Woodward,	Luzerne,	21	20	22	21	22	20	21	23	21	22	20	21	254
Avondale,		22	20	22	21	22	18	21	22	20	20	21	21	250
Delaware and Hudson Co.														
Boston,	Luzerne,	20	17	19	16	16	14	13	13	14	16	13	13	184
Plymouth No. 2,		19	18	18	20	17	....	....	....	....	....	....	....	92
Plymouth No. 3,		20	19	20	20	19	20	20	20	22	23	24	21	248
Plymouth Nos. 4 and 5,		16	14	14	15	7	15	15	16	16	16	13	12	169
Parrish Coal Co.														
Parrish,	Luzerne,	18	20	18	20	20	19	19	18	18	13	18	21	222
Buttonwood,		19	16	15	18	20	19	19	19	18	14	20	22	219
Plymouth Coal Co.														
Dodson,	Luzerne,	17	16	16	18	17	16	17	9	17	19	16	18	196
Kingston Coal Co.														
Gaylord,	Luzerne,	16	15	14	15	19	21	21	22	22	20	21	21	227
George F. Lee Coal Co.														
Chauncey,	Luzerne,	21	17	21	8	21	20	18	19	15	19	18	19	216
Christian and Dainty Coal Co.														
Hillside,*	Luzerne,	....	....	....	....	....	....	....	....	....	16	24	15	55

*Commenced operation in October.

TABLE 4.—Fatal accidents inside and outside of mines

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Number of widows	Number of orphans	Name of Mine	County	Nature and Cause of Accident in Brief
Jan.	5	Frank Reshofskie, ...	Polish,.......	Miner, ...	39	M.	1	6	Parrish, ...	Luzerne,..	Instantly killed by fall of rock while taking skip off face of airway.
	17	Henry Frum, ...	German,.....	Miner, ...	72	S.	....	....	Plymouth No. 3, ...		Instantly killed by fall of top coal at face of chamber.
	18	Thomas Soboleski, ...	Lithuanian,.	Miner, ...	43	M.	1	7	Woodward, ...		Fatally injured by premature blast at face of chamber. Died same day at Moses Taylor Hospital.
	24	John Mazur, ...	Polish,.......	Miner, ...	39	M.	1	4	Dodson, ...		Instantly killed by fall of top coal on gangway.
	24	John Winko, ...	Polish,.......	Laborer, ...	40	M.	1	3			
	24	John Arbatovicz, ...	Lithuanian,.	Laborer, ...	18	S.	....	....			
	28	Joseph Soboleski, ...	Lithuanian,.	Doorboy, ...	16	S.	....	....	Woodward, ...		Kicked in stomach by a mule on gangway. Died January 20.
	29	John Nayalis, ...	Slavonian,...	Miner, ...	44	S.	....	....	Nottingham, ...		Fatally burned by an explosion of gas at face of chamber.
Feb.	13	John Ritscofski, ...	Lithuanian..	Miner, ...	37	M.	1	....	Parrish, ...		Instantly killed. Squeezed between rib and loaded cars on gangway.
	16	Barney Nick, ...	Polish,.......	Laborer, ...	25	S.	....	....	Lance No. 11, ...		Instantly killed by fall of rock at face of chamber.
	16	Bernard Prygint, ...	Lithuanian,.	Laborer, ...	28	M.	1	2	Plymouth No. 5, ...		Instantly killed by fall of rock at face of chamber.
	20	Edward Hahn, ...	American,...	Doorboy, ...	16	S.	....	....	Plymouth No. 2, ...		Instantly killed. Squeezed between loaded and empty cars on airway.
March	2	Stanley Davis, ...	American,...	Brattice helper,	23	M.	1	2	Woodward, ...		Instantly killed by an explosion of gas in chamber.
	2	Edward Reilly, ...	American....	Brattice-man,	22	M.	1	1			
	6	Hugh L. Williams, ...	Welsh,.......	Timberman,	30	S.	....	...	Lance No. 11, ...		Instantly killed by fall of rock at face of chamber.
	7	Michael Churilla, ...	Slavonian....	Slatepicker,	15	S.	....	....	Boston, ...		Instantly killed by revolving shaft. Outside.
	19	Frank Boblanick, ...	Polish,.......	Miner, ...	31	M.	1	3	Nottingham, ...		Fatally burned by an explosion of gas at face of chamber. Died March 24, at City Hospital.

TABLE 4.—Continued

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Number of widows	Number of orphans	Name of Mine	County	Nature and Cause of Accident in Brief
March	21	John Isaac,	Welsh,	Miner,	43	M.	1	6	Parrish,	Luzerne,	Fatally injured by a premature blast on slope. Died the same day at City Hospital.
	26	John McGill,	Irish,	Miner,	40	M.	1	6	Plymouth No. 3,		Instantly killed by fall of top coal while barring out loose coal at face.
	28	Julian Kriefski,	Lithuanian,	Miner,	28	S.	....	...	Woodward,		Fatally injured by fall of coal at face. Died on his way to Moses Taylor Hospital.
April	19	William Finn,	Irish,	Laborer,	34	S.	....	....	Avondale,		Instantly killed by a premature blast.
	29	Styshin Madieski,	Polish,	Miner,	34	M.	1	1	Nottingham,		Instantly killed. Run over by an empty trip on No. 4 slope.
June	25	Victor Savage,	Polish,	Miner,	38	S.	....	....	Plymouth No. 5,		Fatally injured by a premature blast at face. Died same day.
	26	Andrew Solota,	Slavonian,	Miner,	35	M.	1	3	Plymouth No. 3,		Instantly killed by fall of rock at face of chamber.
	27	Frank Rourke,	Irish,	Miner,	61	S.	....	....	Nottingham,		Fatally injured by a premature blast at face. Died June 28.
July	5	Robert Stacey,	American,	Asst. footman,	18	S.	....	...	Woodward,		Instantly killed. Run over by loaded trip on slope.
	11	Stephen Yellinick,	Austrian,	Laborer,	27	S.	....	....	Plymouth No. 5,		Fatally injured by fall of rock at face. Died July 15 in City Hospital.
	19	Michael Brozena,	Russian,	Doorboy,	17	S.	....	....	Parrish,		Instantly killed by runaway trip of loaded cars on No. 9 slope.
	26	Michael Plevan,	Polish,	Miner,	35	M.	1	4	Chauncey,		Fatally injured by fall of top coal at face of chamber. Died July 27 at Mercy Hospital.
Aug.	6	George Gavonski,	Polish,	Laborer,	30	S.	....	...	Nottingham,		Instantly killed by fall of top coal at face of chamber in Red Ash vein.
	6	Ignatz Sturguski,	Polish,	Laborer,	28	M.	1	1	Nottingham,		
Sept.	4	Louis Devershire,	German,	Miner,	37	M.	1	2	Plymouth No. 4,		Instantly killed by fall of top rock at face of chamber.
	21	John Y. Williams,	American,	Laborer,	33	M.	1	4	Buttonwood,		Instantly killed by fall of top rock at face of chamber.
Oct.	2	Adam Noseveski,	Polish,	Miner,	37	M.	1	3	Woodward,		Instantly killed by a dynamite cap exploding in his mouth, at face of airway.

Oct.	5	Gordon Roberts, ...	American,...	Slopeman, .	19	S.	....	....	Chauncey, ...	Luzerne,..	Fatally injured by a loaded car. Outside. Died October 11 at City Hospital.
	7	John Shuby, ...	Russian,.....	Car cleaner,	45	S.	....	....	Buttonwood, ...		Instantly killed. Run over by cars. Outside.
	10	Charles Radzwick, ...	Polish,.......	Miner, ...	43	M.	1	2	Woodward, ...		Fatally injured by a premature blast at face of chamber. Died same night.
	24	Richard Finnigan, ...	Irish,.........	Runner, ...	22	S.	...	...	Avondale, ...		Instantly killed. Dragged by loaded trip on slope.
Nov.	9	William Parker, ...	English,.....	Miner, ...	52	M.	1	5	Gaylord, ...		Instantly killed by fall of top coal at face of chamber.
	18	Martin Dougherty, ...	Irish,.........	Asst. track-layer,	39	M.	1	1	Buttonwood, ...		Instantly killed by a runaway trip on plane.
	26	Michael Pallio, ...	Slavonian,...	Co. laborer.	35	M.	1	1	Nottingham, ...		Instantly killed between truck of props and cross head of cage in shaft.

TABLE 5.—Non-fatal accidents inside and outside of mines

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Name of Mine	County	Nature and Cause of Accident in Brief
Jan.	3	John M. Thomas,	Welsh,	Miner,	66	S.	Nottingham,	Luzerne,	Compound fracture of leg. Struck by wire rope on No. 1 slope.
		Jacob Gabriel,	German,	Miner,	49	M.	Avondale,		Back and foot injured by fall of coal in face of chamber.
	8	Charles Fisher,	American,	Miner,	41	M.	Lance No. 11,		Leg fractured by piece of coal striking him at the face of chamber.
	9	Michael Bereski,	American,	Doorboy,	16	S.	Plymouth No. 3,		Knee dislocated by prop falling against him at face of chamber.
	12	John Androski,	Slavonian,	Miner,	26	S.	Plymouth No. 2,		Leg fractured by fall of rock at face.
	18	Arthur Bevan,	Welsh,	Locomotive brakeman,	21	S.	Woodward,		Foot crushed by electric motor running over it on gangway.
	21	Anthony Shotkiss,	Polish,	Miner,	34	S.	Nottingham,		Hands and face burned by an explosion of gas at face of chamber.
	21	Joseph Davick,	Polish,	Miner,	29	S.	Parrish,		Back and hip injured by fall of slate at face of chamber.
	30	Paul Adamite,	Lithuanian,	Co. laborer,	38	M.	Nottingham,		Arm fractured by being caught between car and roof in chamber.
	12	Stephen Slovack,	American,	Driver,	21	S.	Plymouth No. 2,		Hands and face burned by an explosion of gas in an abandoned chamber.
	13	Joseph Coshenchock,	Lithuanian,	Laborer,	55	M.	Nottingham,		Hands and face burned by an explosion of gas in chamber.
March	2	John Burke,	American,	Miner,	60	M.	Plymouth No. 2,		Collar bone fractured and body bruised. Struck by a runaway car in chamber.
	6	Frank Andel,	Polish,	Miner,	36	M.	Dodson,		Leg fractured. Struck by flying coal from a blast in chamber.
	9	Michael Shonk,	Polish,	Driver,	19	S.	Plymouth No. 2,		Nose and cheek bone fractured. Run over by cars on gangway.
	9	Mansfield Roberts,	American,	Miner,	57	M.	Nottingham,		Hands and face burned by an explosion of gas in face of chamber.
	12	Nicholas Brown,	American,	Driver,	19	S.	Lance No. 11,		Leg fractured. Struck by loaded car on gangway.
	14	Lawrence Heffron,	American,	Footman,	22	S.	Boston,		Leg fractured. Struck by a derailed car on gangway.
	27	Albert Schrader,	American,	Co. laborer,	31	M.	Plymouth No. 2,		Hips squeezed by an overturned loaded car on gangway.

March	27	James Keating, ...	American,...	Miner, ...	60	M.	Woodward, ...	Luzerne,..	Head lacerated and leg fractured by fall of coal in face of chamber.
	29	Luke Smith, ...	American,...	Asst. mason, ...	43	S.	Plymouth No. 3, ...		Scalp wound and concussion of the brain. Struck by an iron pipe in shaft.
April	24	Joseph Kelly, ...	Lithuanian,.	Miner, ...	35	M.	Lance No. 11, ...		Hands and face burned by an explosion of gas in old chamber.
	24	John Chebula, ...	Slavonian,...	Miner, ...	34	M.			
	24	George Benavage, ...	Lithuanian,.	Laborer, ...	24	S.			
	24	William Machonis, ...	Polish........	Laborer, ...	29	S.			
May	3	John Shallalla, ...	Lithuanian,.	Miner, ...	29	S.	Dodson, ...		Leg fractured. Struck by prop at face of chamber.
	8	Andrew Teno, ...	Slavonian,...	Laborer, ...	44	M.	Plymouth No. 2, ...		Collar bone fractured. Struck by prop at face of chamber.
	17	Charles Shewin, ...	American,...	Loader, ...	29	M.	Lance No. 11, ...		Concussion of the brain by falling off car. Outside.
	23	Peter Walski, ...	Polish,.......	Miner, ...	36	M.	Chauncey, ...		Leg fractured. A piece of rock rolled against him in chamber.
	23	William Carroll, ...	American,...	Driver, ...	20	S.	Chauncey, ...		Leg fractured. Struck by T iron rail on gangway.
June	3	David Evans, ...	Welsh,.......	Asst. foreman, ...	53	M.	Nottingham, ...		Compound fracture of leg. Struck by an empty runaway car on gangway.
	10	William Marks, ...	German,.....	Runner, ...	27	S.	Parrish, ...		Compound fracture of leg. Struck by loaded car on gangway.
	10	William Bevan, ...	Welsh,.......	Bratticeman, ...	36	M.	Gaylord, ...		Leg fractured. Struck by runaway car of coal on gangway.
	19	Valentine Czepanick,	Polish,.......	Laborer, ...	23	S.	Plymouth No. 4, ...		Compound fracture of arm and leg by fall of top coal at face of chamber.
	22	Lawrence Sedvoir, ...	Polish,.......	Laborer, ...	23	S.	Nottingham, ...		Hands and face burned by an explosion of gas at face of chamber.
	24	John Galnett, ...	Lithuanian,.	Laborer, ...	28	S.	Woodward, ...		Hands and face burned by an explosion of gas at face of chamber.
July	3	David Thomas, ...	Welsh,.......	Laborer, ...	27	M.	Plymouth, ...		Hands and face burned by an explosion of gas at face of chamber.
	10	Lyman Stubblevine,..	American,...	Miner, ...	46	M.	Avondale, ...		Arm fractured by fall of slate at face of chamber.
	17	John Balo, ...	Austrian,....	Laborer, ...	58	M.	Plymouth No. 4, ...		Ribs fractured by fall of coal at face of chamber.
	19	Jacob Bovitski, ...	Polish,.......	Miner, ...	37	M.	Chauncey, ...		Compound fracture of leg. Caught by rush of coal at face of chamber.
	22	Stephen Paulek, ...	German,.....	Miner, ...	41	M.	Plymouth No. 3, ...		Leg fractured by fall of coal at face of chamber.
	26	Jacob Govat, ...	Polish,.......	Laborer, ...	20	S.	Chauncey, ...		Hands and face burned by an explosion of gas at face of chamber.
	30	Andrew Hoodock, ...	Polish,.......	Miner, ...	45	M.	Plymouth No. 3, ...		Hip dislocated by fall of rock at face of chamber.
	31	John Consavage, ...	Russian,.....	Laborer, ...	20	S.	Nottingham, ...		Hands and face burned by an explosion of gas at face of chamber.
Aug.	2	Arthur Jakes, ...	English,.....	Miner, ...	26	M.	Plymouth No. 5, ...		Back injured by fall of rock at face of chamber.
	5	George Fisher, ...	Polish,.......	Laborer, ...	27	M.	Boston, ...		Leg fractured by fall of slate at face of chamber.
	6	Fred Martin, ...	American,...	Runner, ...	24	S.	Parrish, ...		Back and side injured by fall of rock at face of chamber.
	6	Anthony Petrofski, ..	Russian,.....	Miner, ...	38	M.	Parrish, ...		Hands and face burned by an explosion of gas at face of chamber.

TABLE 5.—Continued

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Name of Mine	County	Nature and Cause of Accident in Brief
Aug.	6	Frank Beniski,	Austrian,	Miner,	40	M.	Plymouth No. 2,	Luzerne,	Collar bone fractured by an empty car on gangway.
	6	Frank Durnoski,	Polish,	Miner,	27	M.	Dodson,		Skull fractured. Struck by coal from premature blast at face of chamber.
	23	Dennis Wolfe,	American,	Laborer,	25	M.	Reynolds,		Leg crushed by fall of rock at foot of chamber.
	30	Joseph Tomalis,	Lithuanian,	Miner,	28	S.	Woodward,		Thighs fractured by fall of slate at face of chamber.
Sept.	3	Frank Vanbuskirk,	American,	Runner,	15	S.	Woodward,		Injured internally between guard rail and empty car on gangway.
	20	Alexander Keasuck,	Russian,	Laborer,	25	S.	Nottingham,		Hands and face burned by an explosion of gas at face of chamber.
	21	Joseph Goretski,	Polish,	Laborer,	22	S.	Nottingham,		Hands and face burned by an explosion of gas at face of chamber.
Oct.	2	Patrick St. John,	Irish,	Miner,	45	M.	Boston,		Three fingers cut off while adjusting chain or breast pulley at face of chamber.
	7	Allen Baylor,	American,	Stable boss,	51	S.	Plymouth No. 4,		Leg fractured and knee dislocated by cage striking fan in shaft.
	9	Mathias Wichenieski,	Russian,	Miner,	48	M.	Buttonwood,		Burned from head to waist by an explosion of gas at face of chamber.
	9	John Percoski,	Russian,	Laborer,	32	S.	Buttonwood,		Ears, neck and hands burned by an explosion of gas at face of chamber.
	15	Frank Vanslofski,	Lithuanian,	Miner,	45	M.	Lance No. 11,		Thigh fractured by premature blast, caused by turning down point of squib; in face of chamber.
	19	Andrew Toysiko,	Slavonian,	Laborer,	21	S.	Plymouth No. 3,		Leg fractured by fall of rock at face of chamber.
	19	James Jakes,	English,	Miner,	31	M.	Plymouth No. 5,		Thigh fractured by fall of rock at face of chamber.
Nov.	8	John Jober,	German,	Runner,	21	S.	Plymouth No. 5,		Elbow dislocated by falling at foot of shaft.
	9	Anthony Sturcavage,	Lithuanian,	Miner,	23	S.	Lance No. 11,		Leg fractured by cage while running across cage pit at foot of shaft.

Nov.	13	William Mitchell,	English,	Miner,	45	M.	Nottingham,	Luzerne,	Face, hands and arms burned by an explosion of gas at face of chamber.
	13	Frank Schaffer,	American,	Laborer,	36	M.	Nottingham,		Hands and face burned by an explosion of gas at face of chamber.
	18	Adam Klimmer,	Polish,	Laborer,	24	S.	Woodward,		Leg fractured. He slipped on a rail and fell at face of chamber.
	19	Stephen Molcan,	Austrian,	Miner,	34	M.	Plymouth No. 5,		Compound fracture of leg by fall of coal at face of chamber.
	19	Peter Olsienski,	Russian,	Miner,	33	M.	Buttonwood,		Leg fractured and arm lacerated by fall of coal in chamber.
	27	George Brunck,	Lithuanian,	Miner,	35	S.	Nottingham,		Hands and face burned by an explosion of gas in chamber.
	29	Barney Comiski,	Polish,	Miner,	26	S.	Woodward,		Leg fractured by fall of top coal at face of chamber.
Dec.	4	George Melles,	Lithuanian,	Laborer,	30	S.	Nottingham,		Hands and face burned by an explosion of gas.
	6	Peter Barzolofski,	Lithuanian,	Miner,	33	M.	Nottingham,		Temple bone fractured by blast. He attempted to fire two holes at the same time.
	10	Joseph Wampole,	American,	Laborer,	63	M.	Gaylord,		Hands and face scalded by steam. Outside.
	16	John Doran,	American,	Breaker oiler,	17	S.	Plymouth No. 3,		Ankles fractured. Caught by revolving shaft. Outside.
	18	Anthony Ozeh,	Austrian,	Miner,	43	M.	Plymouth No. 4,		Arm fractured by fall of roof.
	28	Peter Carver,	American,	Slatepicker,	14	S.	Avondale,		Arm fractured while trying to adjust a belt on revolving pulley. Outside.

FATAL ACCIDENTS

Falls of Coal

January 24, Dodson No. 5 lift Westside Red Ash vein, John Mazur, miner, John Winko and John Arbatovicz, laborers, were cleaning up a fall of rock and coal that occurred on the gangway. At the place where the accident occurred two benches of coal called "Devil's tier" and "Blacksmith" were allowed to remain. It is a custom in the Red Ash vein if the rock or buckstone, which is the roof proper, shows any tendency of danger to allow a bridge, or as some would call it, a brace of one or two benches of coal to remain to hold the rock up, the coal in many instances serving as the best roof. This course is greatly in evidence during the first mining, or while the working place is advancing. Upon retreating the top coal is blasted down and the buckstone left to fall behind. This accident was not without its warning, for a driver upon taking an empty car into the place where the victims were at work, heard the cracking and working of the top coal, also the upper pillar. He notified the men of their danger, but they went on with their work. The driver, realizing that danger was imminent, beat a hasty retreat and had proceeded but a short distance out the gangway when the fall occurred. It was necessary to remove twenty-two mine cars of coal before the bodies were recovered. I reached the mine immediately after the bodies had been taken out, and found upon my investigation, that a slip was plainly visible on the upper side, the entire thickness of the vein pitching at an angle approximately of ·75 degrees, which produced a loose end in connection with the pillar that had been shattered by a slight squeeze sometime before. They had blasted the rock down on the inside of the top coal, and found excellent roof above. Michael Stincavage, who escaped injury, stated that the coal had been thoroughly examined and pronounced safe.

August 6, Nottingham, 7 Plane West Gangway, Red Ash vein, George Gavonski and Ignatz Sturguski, laborers, were sitting down in conversation with the miner who was engaged in drilling a hole in the bottom coal, when suddenly a fall of top coal fell upon them, killing Sturguski instantly and fatally injuring Gavonski, who died the same day at Wilkes-Barre City Hospital. Upon investigation of this accident, I found that the coal that had fallen upon the victims was the so-called 18 inch bench. · It is customary with all miners, particularly English speaking miners, when a certain thickness of the vein is mined, including the 18 inch, to keep it trimmed to the face and not permit it to hang back on account of its treacherous condition, usually a good smooth over it being intermingled with slips. The bench in this instance had been permitted to hang back for several yards, and the water percolating through the strata had a tendency to separate it from the other benches. If it had been thoroughly tested with a drill, its condition could have been easily ascertained, and steps could have been immediately taken to blast it down or secure the same with timber.

Explosions of Gas

March 2, Woodward, at 3.20 P. M., 7 West lift No. 1 Slope, Red Ash vein. A serious explosion of gas occurred, instantly killing Stanley Davis and Edward Riley, bratticemen. On the morning of the explosion the fire boss had discovered three feet of gas in the cross-cut of the tenth chamber, and assisted by the bratticemen, he proceeded at once to remove the gas by the use of canvas. At 12:15 P. M. the fire boss left. At that time the bratticemen were engaged in replacing the canvas with board strippings, after which they proceeded to build a brattice in the cross-cut below. This work was in progress when the explosion of gas took place. In the face of the chamber, where the explosion took place, a heavy fall of rock had occurred, dislodging several sets of timber. A short distance below the fall, the body of Riley was discovered, blown upon the gob, it was so presumed. Davis's body was discovered at the cross-cut, at which place prior to the accident he was engaged at work. It was thought that Riley encountered the body of gas and ignited it with a naked lamp. It seemed to be the custom with these men to do a great portion of their work by using open lights. I had an opportunity on June 15, 1906, of seeing these men remove a body of gas, and while constructing the brattice their open lights were burning, although they had safety lamps in their possession at the time. I immediately called their attention to this dangerous practice, as I am a firm believer in the use of safety lamps only by bratticemen in gaseous mines. The use of open lights endangers their own lives as well as the lives of others, especially when engaged in removing explosive gases. This was evident in the present case. The force of the explosion caused disarrangement of the ventilation. The products of combustion were greatly in evidence and a few of the rescuers were overcome by afterdamp. In order to save their lives artificial means of respiration had to be resorted to. A few days after the explosion, in conversation with Mr. Henry G. Davis, district superintendent, it was decided that men engaged as bratticemen should use safety lamps absolutely while engaged in their work in the mines, especially gaseous mines. The order since then has been strictly complied with.

CONDITION OF COLLIERIES

LEHIGH AND WILKES-BARRE COAL COMPANY

Nottingham No. 15 Colliery.—Ventilation, drainage and general condition as to safety good.

Lance No. 11 Colliery.—Ventilation, drainage and condition as to safety good.

Reynolds No. 16 Colliery.—General condition as to safety good.

DELAWARE, LACKAWANNA AND WESTERN RAILROAD COMPANY

Woodward Colliery.—General condition as to safety good.

Avondale Colliery.—General condition as to safety good.

DELAWARE AND HUDSON COMPANY

Boston Colliery.—General condition as to safety good.
Plymouth No. 2 Colliery.—General condition as to safety good.
Plymouth No. 3 Colliery.—General condition as to safety good.
Plymouth No. 4 Colliery.—General condition as to safety good.
Plymouth No. 5. Colliery.—General condition as to safety good.

PARRISH COAL COMPANY

Parrish Colliery.—General condition as to safety good.
Buttonwood Colliery.—General condition as to safety good.

PLYMOUTH COAL COMPANY

Dodson Colliery.—General condition as to safety good.

KINGSTON COAL COMPANY

Gaylord Colliery.—Ventilation and drainage fair, condition as to safety good.

GEORGE F. LEE COAL COMPANY

Chauncey Colliery.—No. 3 Slope, Ventilation and drainage good. Condition as to safety good.

Breaker Level Drift.—Ventilation fair, drainage poor. Condition as to safety good.

CHRISTIAN AND DAINTY COAL COMPANY

Hillside Colliery.—Ventilation poor, drainage good. Condition as to safety good.

IMPROVEMENTS

LEHIGH AND WILKES-BARRE COAL COMPANY

Lance No. 11 Colliery.—Inside: No. 24 Tunnel, Red Ash to Top Red Ash.

No. 23 Tunnel, Baltimore to Cooper.

DELAWARE, LACKAWANNA AND WESTERN RAILROAD COMPANY

Avondale Colliery.—The ventilating fan at the main air shaft was rebuilt during the year. Work of connecting Nos. 5 and 7 slopes, Ross vein, by a rock slope on a 20 degree pitch, is under way.

Two electric reel device locomotives were installed for transportation purposes.

The work of installing an inside electric sub-station No. 2 Slope, Red Ash vein, to be connected by the Nanticoke power plant by high tension lines through a 14 inch bore hole from the surface, is under way and will be completed early in 1908.

The work of installing a 500 gallon electrically driven centrifugal pump, Ross vein is under way.

The old steam engine at foot of No. 9 plane has been disposed of and a 160 H. P. electric hoist has been installed to take its place.

Improvements were made to the boiler plant and were completed by the installation of a 1250 feed water heater and 2 feed water Duplex pumps, 18x16x8, making this steam plant equal to any other in the district.

A steel bridge crossing the railroad tracks near the breaker was built during the year and is a great improvement over the old wood trestle formerly in use.

Concrete retaining walls have been erected around the colliery, which greatly improve its appearance.

Woodward Colliery.—The work of sinking slope from Surface to Abbott vein has been completed. The work of development for second opening is now going on in this slope.

A rock tunnel was driven from Cooper vein to Five Foot vein and connection made with No. 1 shaft for second opening.

A rock slope was sunk through fault from Hillman vein to Hillman vein a distance of 600 feet on a 15 degree dip, and it is also connected with No. 1 shaft for second opening.

Five new air bridges were erected which have greatly improved ventilation.

The work of installing an electric sub-station near the head of No. 2 slope, Cooper vein, is now under way. The high tension lines will be carried from the Nanticoke power plant to this station through a 10 inch bore hole, sunk from the surface to the Red Ash vein, about 1000 feet west of No. 1 shaft. The current will be transformed at this point and used by the electric locomotives, slope hoists, etc.

The work of sinking what is known as Woodward No. 3 shaft was begun September 13. This is a four compartment shaft, containing one airway, one pump way and two hoist ways. It will be used to mine the coal in the upper seams and to lower the coal to No. 1 Tunnel level. From No. 1 Tunnel level the coal will be hauled to the foot of No. 1 shaft by electric locomotives and then hoisted to the surface. This opening will be very beneficial to the colliery, as it will result in releasing a large quantity of explosive gases that are now pent up under a very high pressure.

The work of sinking the caisson is being done by the Foundation Company of New York City, under the supervision of Mr. R. V. Norris, Consulting Engineer for the D. L. and W. R. R. Company. This, I presume, is the first time that work of this kind has been attempted in connection with the sinking of a coal mine shaft.

The work of sinking the caisson almost to the rock was very successfully carried on with but little trouble. However, a sudden rise in the river of about 10 feet in about ten hours, resulted in forcing considerable water through the clay and down along the caisson into the bottom of the shaft. The Foundation Company people did not think the matter a very serious one, but very little progress has been made within the last two or three weeks, as a large amount of water and sand is being pumped daily from this opening.

DELAWARE AND HUDSON COMPANY

Plymouth No. 2. Colliery.—Outside.—Pumping plant, 62′x26′, completed for entire division with tunnel to river 186 feet long, 8 feet wide and 7 feet high, to furnish water for boilers. Boiler house enlarged 36′x54′ and two new 78″ boilers, locomotive type, installed.

No. 2 shaft.—Concrete for 79 feet from surface to rock, also retimbered from concrete to bottom, and head frame replaced.

New brick oil house erected 18′x28′.

No. 6 slope in Stanton vein extended 90 feet and stopped in fault.

No. 14 rock plane driven from Stanton vein 550 feet, cutting Hillman, Lance and Abbott veins, and intersecting a 8 by 6″ bore hole from surface to rock a distance of 203 feet, for use of rope to operate place.

Plymouth No. 3 Colliery.—Red Ash sump lengthened 450 feet.

No. 6 slope in Red Ash vein opened and driven 260 feet.

No. 15 rock tunnel driven 460 feet from bottom to top Red Ash vein.

Rock tunnel driven 100 feet from Stanton vein to tap shaft for ventilation.

Plymouth No. 4 Colliery.—No. 11 plane, Top Red Ash vein, extended 170 feet.

Plymouth No. 5. Colliery.—Boiler house erected 50′x60′ and two Sterling 300 H. P. water type boilers installed.

Boston Colliery.—No. 13 plane, in Bottom Red Ash vein, extended 300 feet.

PARRISH COAL COMPANY

Parrish Colliery.—A rock plane driven from Baltimore vein to the Five Foot vein for ventilation, a distance of 279 feet, size 7′ by 18′ on a grade of fifteen degrees.

Sank No. 6 slope Baltimore vein a distance of 200 feet.

Buttonwood Colliery.—Sunk No. 4 slope, Stanton vein, a distance of 300 feet, to the boundary line.

Installed a new engine on top of Stanton plane, for plane and slope, geared 18″ by 30″ (double engine) 460 H. P.

Sank a slant slope from top of No. 2 slope Hillman vein 600 feet, to mine coal in a synclinal between two rolls.

A new plane driven on the Abbott vein 900 feet long, and a pair of geared engines 12″ by 16″, 124 H. P., installed.

A tunnel driven from the Kidney vein to the Abbott vein, to strike the vein at the southern boundary line, a distance of 470 feet size 7′ by 12.

KINGSTON COAL COMPANY

Gaylord Colliery.—The old cylinder boiler plant has been dispensed with and 900 H. P. B. and W. boilers have been erected and installed in brick house. Said plant has been completed with duplicate feed pumps, Cochran water heater, etc.

A new brick house has been erected for electric generator and air compressor.

Two new 7½ ton electric locomotives have been purchased and electric haulage is in course of construction between the foot of the Bennett slope and the Red Ash.

A new washery or wet side addition to the breaker is in course of construction and almost completed, with three banks of shakers, duplicate rolls, duplicate elevator.

A Compound Duplex 28″x36″ pump is being installed.

A new column pump discharge bore hole completed from surface to Bennett vein.

New steam pipe bore hole.

Three tunnels completed in Checker vein.

A second opening manway between Checker and Cooper veins.

Tenth District

LUZERNE COUNTY

Wilkes-Barre, Pa., February 20, 1908.

Hon. James E. Roderick, Chief of Department of Mines:

Sir: I have the honor of transmitting herewith my annual report as Inspector of Mines for the Tenth Anthracite District, for the year ending December 31, 1907.

The report contains the statistical information required by law, with a brief description of the fatal accidents and the condition of the mines.

Respectfully submitted,

JOSEPH J. WALSH,

Inspector.

SUMMARY OF STATISTICS

Number of collieries,	12
Number of mines,	39
Number of mines in operation,	39
Number of tons of coal shipped to market,	3,894,871
Number of tons used at mines for steam and heat,	386,371
Number of tons sold to local trade and used by employes	52,652
Number of tons produced,	4,333,894
Number of tons produced by compressed air machines,	——
Number of tons produced by electrical machines,	——
Number of persons employed inside of mines,	6,978
Number of persons employed outside,	2,500
Number of fatal accidents inside of mines,	36
Number of fatal accidents outside,	9
Number of non-fatal accidents inside of mines,	66
Number of non-fatal accidents outside,	17
Number of tons of coal produced per fatal accident inside,	120,386
Number of persons employed per fatal accident inside,	194
Number of persons employed per fatal accident outside,	278
Number of persons employed per non-fatal accident inside	106
Number of persons employed per non-fatal accident outside,	147
Number of wives made widows,	16
Number of children orphaned,	42
Number of steam locomotives used inside of mines,	3
Number of steam locomotives used outside,	24
Number of compressed air locomotives used inside,	8
Number of electric motors used inside,	24
Number of electric motors used outside,	1
Number of fans in use,	39
Number of gaseous mines in operation,	34
Number of non-gaseous mines in operation,	5
Number of new mines opened,	5
Number of old mines abandoned,	2

TABLE A

PRODUCTION OF COAL

Names of Operators	Tons
Susquehanna Coal Company,	1,488,537
Delaware, Lackawanna and Western Railroad Company,	855,593
Lehigh and Wilkes-Barre Coal Company,	829,946
West End Coal Company,	683,680
Alden Coal Company,	290,432
Pittston Coal Mining Company,	97,619
Lehigh Valley Coal Company,	88,087
Total,	4,333,894

Production by Counties

Luzerne,	4,333,894

TABLE B.—Fatal and non-fatal accidents inside and outside of mines; number of tons of coal produced per accident; number of persons employed; number employed per accident

Names of Operators	Fatal Accidents			Non-fatal Accidents			Tons of coal produced per fatal accident inside	Tons of coal produced per non-fatal accident inside	Number of employes inside	Number of employes outside	Total number of employes	Number of employes inside per fatal accident	Number of employes outside per fatal accident	Number of employes inside per non-fatal accident	Number of employes outside per non-fatal accident
	Inside	Outside	Total	Inside	Outside	Total									
Susquehanna Coal Co.,	10	3	13	25	7	32	148,854	59,541	2,415	1,077	3,492	242	359	97	154
Delaware, Lackawanna and Western Railroad Co.,	7	1	8	15	2	17	122,228	57,039	1,596	473	2,069	228	473	106	236
Lehigh and Wilkes-Barre Coal Co.,	12	3	15	14	6	20	69,162	59,282	1,256	293	1,549	105	97	90	49
West End Coal Co.,	5	1	6	6	1	7	136,736	113,946	935	318	1,253	187	318	156	318
Alden Coal Co.,	....	....	....	2	....	2	....	145,216	525	181	706	....	....	263	....
Pittston Coal Mining Co.,	2	....	2	....	1	1	48,809	97,619	102	73	175	51	....	....	73
Lehigh Valley Coal Co.,	....	1	1	4	....	4	88,087	22,022	149	85	234	....	85	37	....
Totals and averages for district,	36	9	45	66	17	83	120,386	65,665	6,978	2,500	9,478	194	278	106	147

TABLE C.—Classification of Fatal Accidents Inside and Outside of Mines

	Months													
	January	February	March	April	May	June	July	August	September	October	November	December	Totals	Percentages
Causes of Accidents Inside														
Falls of coal,	....	....	1	....	....	1	1	....	....	....	....	....	3	8.33
Falls of slate,	....	....	....	....	....	....	1	....	....	....	....	1	2	5.55
Falls of roof,	1	....	1	....	....	....	1	1	2	1	....	1	8	22.22
Mine cars,	....	2	1	....	2	....	....	....	1	1	1	....	8	22.22
Suffocation by smoke,	....	7	....	....	....	....	....	....	....	...	....	....	7	19.44
Explosions of powder and dynamite,	....	....	....	....	1	....	....	....	....	...	....	....	1	2.78
Falling into shafts,	....	....	....	....	....	....	....	1	....	...	1	....	2	5.56
Machinery,	....	....	....	....	1	....	....	....	....	....	1	....	2	5.56
Electricity,	....	....	....	....	....	....	....	1	....	...	....	....	1	2.78
Miscellaneous,	....	....	1	....	....	....	1	....	....	...	....	....	2	5.56
Totals,	1	9	4	....	4	1	4	3	3	2	3	2	36	100.00
Causes of Accidents Outside														
Cars,	....	1	...	1	...	2	1	....	....	1	....	....	6	66.67
Miscellaneous,	1	....	...	1	....	....	....	....	....	....	....	1	3	33.33
Totals,	1	1	....	2	....	2	1	....	....	1	....	1	9	100.00
Grand totals inside and outside,	2	10	4	2	4	3	5	3	3	3	3	3	45	

TABLE D.—Classification of Non-fatal Accidents Inside and Outside of Mines

	Months													
	January	February	March	April	May	June	July	August	September	October	November	December	Totals	Percentages
Causes of Accidents Inside														
Falls of coal,	....	....	...	....	2	....	....	....	....	...	1	....	3	4.55
Falls of slate,	....	....	1	....	....	1	....	1	....	...	....	....	3	4.56
Falls of roof,	3	2	1	2	....	....	1	1	....	1	3	1	15	22.73
Mine cars,	1	....	2	4	2	1	....	1	4	...	3	2	20	30.30
Explosions of gas and dust,	....	4	...	....	....	1	...	1	....	...	...	1	7	10.60
Premature blasts,	2	....	...	1	2	....	....	....	....	...	...	....	5	7.58
Mules,	....	....	...	....	....	....	1	....	....	...	....	....	1	1.51
Miscellaneous,	1	3	...	....	....	....	1	3	....	3	1	....	12	18.17
Totals,	7	9	4	7	6	3	3	7	4	4	8	4	66	100.00
Causes of Accidents Outside														
Cars,	.. ..	....	1	2	2	....	....	....	....	1	...	2	8	47.06
Machinery,	....	....	1	1	....	....	....	....	....	...	...	....	2	11.76
Miscellaneous,	4	....	1	1	....	....	....	....	1	...	....	...	7	41.18
Totals,	4	....	3	1	2	.. .	....	....	1	1	....	2	17	100.00
Grand totals inside and outside,	11	9	7	11	8	3	3	7	5	5	8	6	83	

TABLE E.—Occupations of Persons Killed or Fatally Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Inside													
Miners,	....	4	1	....	1	1	2	1	2	....	1	2	15
Miners' laborers,	1	1	1	....	....	....	1	1	....	....	....	....	5
Drivers and runners,	....	1	....	....	....	....	....	....	1	....	....	....	2
Doorboys and helpers,	....	2	....	....	1	....	1	....	....	2	1	....	7
Company men,	....	....	....	....	....	....	....	1	....	....	....	....	1
All other employes,	....	1	2	....	2	....	....	....	....	....	1	....	6
Totals,	1	9	4	....	4	1	4	3	3	2	3	2	36
Outside													
Engineers and firemen,	....	1	....	....	....	....	....	....	....	....	....	....	1
Slatepickers (boys),	....	....	....	....	....	....	....	....	....	....	....	1	1
All other employes,	1	....	....	2	....	2	1	....	....	1	....	....	7
Totals,	1	1	....	2	....	2	1	....	....	1	....	1	9
Grand totals inside and outside,	2	10	4	2	4	3	5	3	3	3	3	3	45

TABLE F.—Occupations of Persons Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Inside													
Mine foremen,	....	2	....	....	....	....	....	....	....	....	....	....	2
Fire bosses and assistants,	....	....	....	....	....	....	....	....	....	....	....	1	1
Miners,	3	2	2	3	4	1	....	4	1	2	2	1	25
Miners' laborers,	3	3	....	1	2	....	2	1	....	....	2	....	14
Drivers and runners,	....	....	2	2	....	....	1	2	1	1	2	1	12
Doorboys and helpers,	....	1	....	1	....	1	....	....	....	....	....	1	4
Company men,	....	....	....	....	....	....	....	....	2	....	2	....	4
All other employes,	1	1	....	....	....	1	....	....	....	1	....	....	4
Totals,	7	9	4	7	6	3	3	7	4	4	8	4	66
Outside													
Foremen,	...	...	....	1	...	...	...	...	...	...	...	....	1
Blacksmiths and carpenters,	....	....	....	....	1	....	....	....	....	....	....	....	1
Engineers and firemen,	1	....	....	1	....	....	....	....	....	....	....	....	2
Slatepickers (boys),	1	....	....	1	....	....	....	....	....	....	....	....	2
All other employes,	2	....	3	1	1	....	....	....	1	1	....	2	11
Totals,	4	....	3	4	2	....	....	....	1	1	....	2	17
Grand totals inside and outside,	11	9	7	11	8	3	3	7	5	5	8	6	83

TABLE G.—Nationality of Persons Killed or Fatally Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
American,	....	2	1	....	3	1	1	....	....	1	1	1	11
English,	....	....	....	....	....	....	....	2	....	....	....	....	2
Welsh,	1	1	....	....	....	....	....	....	1	....	....	....	3
Polish	1	6	3	1	1	1	2	1	2	2	1	....	21
Hungarian,	....	....	....	....	....	....	1	....	....	....	....	....	1
Italian,	....	....	....	....	....	....	....	....	....	....	....	1	1
Slavonian,	....	....	....	....	....	1	....	....	....	....	....	....	1
Lithuanian,	....	1	....	....	....	....	1	....	....	....	1	1	4
Austrian,	....	....	....	1	....	....	....	....	....	....	....	....	1
Totals,	2	10	4	2	4	3	5	3	3	3	3	3	45

TABLE H.—Nationality of Persons Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
American,	1	1	4	3	2	....	1	1	1	1	....	2	17
English,	....	1	1	2	....	....	....	....	1	....	....	....	5
Welsh,	1	1	....	....	....	1	....	....	1	1	1	....	6
Irish,	....	....	....	1	....	....	....	....	....	....	....	....	1
German,	1	1	....	....	....	....	....	....	....	....	1	....	3
Polish,	7	5	....	3	4	2	1	4	1	3	4	2	36
Italian,	1	....	....	....	1	....	....	....	....	....	....	1	3
Slavonian,	....	....	....	....	1	....	1	1	1	....	2	....	6
Lithuanian,	...	...	2	1	...	...	...	1	...	...	...	....	4
Austrian,	....	....	....	...	....	....	....	....	....	....	....	1	1
Russian,	....	....	....	1	....	....	....	....	....	....	....	....	1
Totals,	11	9	7	11	8	3	3	7	5	5	8	6	83

TABLE I.—Operators and mines, kind of openings, type and size of fans, size of furnaces, volume of air produced by fan or furnace per minute, number of splits of air currents, and number of persons employed inside

Names of Operators and Mines	Kind of opening	Gaseous or non-gaseous	Method of ventilation	Diameter of fan in feet	Width of blades in feet	Depth of blades in feet	Number of revolutions per minute	Water gauge developed—in inches	Name of fan	Power used	Area of furnace bars in square feet	Number of splits of air currents	Number of cubic feet of air per minute entering the mine at inlet	Total quantity of air per minute circulating in all the splits in cubic feet	Number of persons employed inside
Susquehanna Coal Co.															
Colliery No. 5:															
Number 2,	Shaft,...	Gaseous,...	Fan,...	25	8	8	60	1.6	Guibal,	Steam,.....	..				
Number 2,				20	6	6	65	1.5				6	110,400	80,000	296
Number 4,				20	6	6	60	1.1			....	2	56,000	39,000	146
Number 5,				8	2	3	30	.2	Sturdevant,	Steam,.......	....	4	65,000	61,000	85
				16	4	6	75	.1	Guibal,	Steam,.......	....				
				25	8	8	100	.2				8	174,810	116,520	253
Number 4,	Slope,....	Gaseous,...	4 Fans,	20	6	6	80	.2							
				25	8	8	60	1.8							
Colliery No. 6:															
Number 6,	Tunnel,..	Gaseous,..	4 Fans,	25	8	8	54	.9	Guibal,	Steam,.....	....	5	61,270	46,110	184
Number 6,	Slope,....			20	6	6	58	1			....	5	93,865	89,630	248
Number 6,	Shaft,....			25	8	8	54	.9			....	5	82,250	81,332	230
Number 7,	Shaft,....			20	6	6	60	2			....	4	86,000	83,500	206
Number 10,	Slope,...	Gaseous,.	Fan,.....	7	2	3	175	1.5	Capell,	Electricity,..	....	1	*	....	40
Number 1,	Drift,...	Gaseous,.										1			20
Colliery No. 7:															
Number 1, South,	Shaft,....	Gaseous,...	Fan,.....	25	8	8	60	1.6	Guibal,	Steam,.....	....	9	141,820	89,600	353
Number 1, North,	Shaft,....	Gaseous,...	2 Fans,	25	8	8	60	1.7			....	12	208,500	178,700	415
				20	6	6	72	1.5							

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*Broadcast.

Delaware, Lackawanna and Western Railroad Co.															
Bliss Colliery:															
Bliss,	Shaft,	Gaseous,	2 Fans,	35	9.2	9.1	39	1.5	Guibal,	Steam,	..	10	86,900	75,400	222
				24	4.3	10	......	......							
Espy,	Tunnel,	Gaseous,	2 Fans,	12	3.6	3	145	1.4			..	5	48,500	41,700	82
				10	2.7	2.7	120	.7							
Auchincloss Colliery:															
Numbers 1 and 2,	Shafts,	Gaseous,	Fan,	35	9.6	7.1	50	1.4	Guibal,	Steam,	....	9	131,170	110,600	330
Truesdale Colliery:															
Mills,	Slope,	Gaseous,	Fan,	14	3.6	3	120	1.5	Open running,	Steam,	....	3	70,400	51,400	133
Truesdale,	Tunnel,	Non-gas.	Fan,	12	3	5	70	1.2	Open running,	Electricity,	....	4	37,600	31,500	24
Number 1,	Shaft,	Gaseous,	Fan,	25	7	5	32	.6	Guibal,	Steam,	....	2	50,500	39,200	110
Number 2,															
Lehigh and Wilkes-Barre Coal Co.															
Wanamie Colliery No. 18:															
Number 2,	Slope,	Gaseous,	Fan,	24	8	6	70	1.9	Guibal,	Steam,	...	7	118,850	110,400	357
Number 1,	Drift,											1	18,350	15,700	45
Number 3,	Slope,	Gaseous,	Fan,	25	8	6	70	1.7	Guibal,	Steam,	...	1	35,840	30,720	30
Number 3,	Drift,											4	109,800	85,400	150
Polander,	Drift,											1	11,960	10,140	35
Sugar Notch Colliery:															
Number 9,	Shaft,	Gaseous,	2 Fans,	20	6.8	5	72	1.4	Guibal,	Steam,	...	15	403,630	309,420	505
				24	8	6	60	1.4							
West End Coal Co.															
West End Colliery:															
Sand Drift,	Drift,	Non-gas.	Fan,	16	6	4	50	1.2	Guibal,	Steam,	...	1	38,300	21,000	50
			Fan,	16	6	4	80	1.4							
Long Drift,	Drift,	Gaseous,		20	6	6	75	.8				8	85,150	76,700	307
Number 1 Lee,	Drift,	Non-gas.	Fan,	16	6	4	60	1.4	Guibal,	Electricity,	...	3	74,800	48,500	136
Golden Drift,	Drift,	Non-gas.	Fan,	16	6	4	60	1	Guibal,	Steam,	...	4	73,500	69,000	165
Alden Coal Co.															
Alden Colliery:															
Number 1,				15	5	5	55	.9	Guibal,	Steam,	...	5	77,000	64,200	63
Number 2,				15	5	5	68	1.2	Guibal,	Steam,					
Number 2,	Shaft,	Gaseous,	Fan,	25	8	8	66	1.1	Guibal,	Steam,	...	16	203,702	183,210	304
Number 2,				24	9	5.1	58	1	Vulcan,	Steam,					
Pittston Coal Mining Co.															
Hadleigh,	Shaft,	Non-gas.	Fan,	17	4.6	5.6	80	1.5	Tamaqua,	Steam,	...	4	56,000	30,800	77
Lehigh Valley Coal Co.															
Warrior Run,	Slope,	Gaseous,	Fan,	20	6.5	5	72	1.5	Guibal,	Steam,	...	5	110,270	48,000	177
			Fan,†	20	6	8	......	......	Guibal,	Steam,					

†Reserve.

TABLE 1.—Operators, location of collieries, railroads, etc.

Names of Operators and Collieries	County	Name of General Superintendent	Post Office	Name of Superintendent	Post Office	Railroad to Mine
Susquehanna Coal Co.						
Colliery No. 5,	Luzerne,	Robert A. Quin,	Wilkes-Barre,	Francis H. Kohlbraker,	Nanticoke,	Pennsylvania
Colliery No. 6,						
Colliery No. 7,						
Delaware, Lackawanna and Western Railroad Co.						
Auchincloss,	Luzerne,	R. A. Phillips,	Scranton,	H. G. Davis,	Kingston,	D. L. and W.
Truesdale,						
Bliss,						
Lehigh and Wilkes-Barre Coal Co.						
Sugar Notch No. 9,	Luzerne,	C. F. Huber,	Wilkes-Barre,	W. H. Herring, Outside. M. R. Morgans, Inside,	Wilkes-Barre,	C. R. R. of N. J.
Wanamie No. 18,						
West End Coal Co.						
West End,	Luzerne,	H. H. Brady, Jr.,	Scranton,	H. A. Fillmore,	Shickshinny,	Pennsylvania
West End Washery,						
Alden Coal Co.						
Alden,	Luzerne,	K. M. Smith,	Alden Station,			C. R. R. of N. J.
Pittston Coal Mining Co.						
Hadleigh,	Luzerne,	John J. O'Boyle,	Sugar Notch,	Thomas P. Malone,	Sugar Notch,	C. R. R. of N. J.
Lehigh Valley Coal Co.						
Warrior Run,	Luzerne,	S. D. Warriner,	Wilkes-Barre,	Thomas Thomas,	Wilkes-Barre,	Lehigh Valley

TABLE 2.—Number of tons of coal mined, number of days worked, number of persons employed, number killed and injured, quantity of powder and dynamite used, etc.

Names of Operators and Collieries	County	Number of tons of coal shipped to market	Number of tons used at collieries for steam and heat	Number of tons sold to local trade and used by employes	Total production of coal in tons	Number of days worked	Number of employes	Number of fatal accidents	Number of non-fatal accidents	Number of kegs of powder used	Number of pounds of dynamite used	Number of horses and mules
Susquehanna Coal Co.												
Colliery No. 5,	Luzerne,	372,663	74,369	16,750	463,782	250	1,232	3	12	12,678	28,771	134
Colliery No. 6,		531,592	45,057	4,468	581,117	252	1,104	2	7	18,213	5,785	106
Colliery No. 7,		384,095	59,543	....	443,638	251	1,156	8	13	8,257	80,282	152
Totals,	....	1,288,350	178,969	21,218	1,488,537	......	3,492	13	32	39,148	114,838	392
Delaware, Lackawanna and Western Railroad Co.												
Auchincloss,	Luzerne,	185,865	20,863	7,310	214,038	214	601	1	10	3,746	16,610	35
Truesdale,		285,693	13,505	28	299,226	212	663	3	4	10,306	25,235	32
Bliss,		314,980	25,000	2,349	342,329	226	805	4	3	10,460	5,848	46
Totals,	....	786,538	59,368	9,687	855,593	......	2,069	8	17	24,512	47,693	113
Lehigh and Wilkes-Barre Coal Co.												
Sugar Notch No. 9,	Luzerne,	292,878	18,054	1,895	312,827	204	698	2	5	10,987	21,548	79
Wanamie No. 18,		473,284	41,460	2,375	517,119	233	851	13	15	13,322	26,263	122
Totals,	....	766,162	59,514	4,270	829,946	......	1,549	15	20	24,309	47,811	201
West End Coal Co.												
West End,	Luzerne,	570,521	40,440	8,965	619,926	257	1,238	6	7	15,888	167,915	78
West End Washery,		63,754	....	....	63,754	......	15	......	......	....	....	.....
Totals,	....	634,275	40,440	8,965	683,680	......	1,253	6	7	15,888	167,915	78

TABLE 2.—Continued

Names of Operators and Collieries	County	Number of tons of coal shipped to market	Number of tons used at collieries for steam and heat	Number of tons sold to local trade and used by employes	Total production of coal in tons	Number of days worked	Number of employes	Number of fatal accidents	Number of non-fatal accidents	Number of kegs of powder used	Number of pounds of dynamite used	Number of horses and mules
Alden Coal Co. Alden,	Luzerne,	265,868	17,788	6,776	290,432	221	706	......	2	8,846	22,020	73
Pittston Coal Mining Co. Hadleigh,	Luzerne,	86,978	10,000	641	97,619	171	175	2	1	2,186	4,650	17
Lehigh Valley Coal Co. Warrior Run,	Luzerne,	66,700	20,292	1,095	88,087	160	234	1	4	2,451	1,939	23
Grand totals,		3,894,871	386,371	52,652	4,333,894	......	9,478	45	83	117,340	406,866	897

TABLE 2.—Part 2

Names of Operators	County	Number of Boilers					Locomotives			Number of steam engines of all classes	Total horse power	Number of pumps delivering water to surface	Capacity in gallons per minute	Quantity delivered to surface per minute—gallons	Number of electric dynamos	Number of air compressors
		Cylindrical	Horse power	Tubular	Horse power	Total horse power	Steam	Air	Electric							
Susquehanna Coal Co.,	Luzerne,	33	1,155	45	11,764	12,919	14	8	2	77	12,750	13	9,450	4,900	2	12
Delaware, Lackawanna and Western Railroad Co.,		......	....	21	3,284	3,284	1	.....	18	57	7,600	9	5,875	4,050	3	4
Lehigh and Wilkes-Barre Coal Co.,		......	....	16	3,166	3,166	4	......	......	69	4,704	5	5,522	3,388	......	.....
West End Coal Co.,		......	....	10	2,100	2,100	6	.....	5	18	1,200	4	1,550	1,300	3	2
Alden Coal Co.,		......	....	8	1,550	1,550	2	.....	......	9	1,375	3	1,800	1,000	......	3
Pittston Coal Mining Co.,		......	....	2	600	600	......	......	......	13	500	1	400	300	......	.....
Lehigh Valley Coal Co.,		......	....	10	1,500	1,500	......	.....	......	12	1,800	1	1,500	1,300	......	1
Totals,	....	33	1,155	112	23,964	25,119	27	8	25	255	29,929	36	26,097	16,238	8	22

TABLE 3.—Number of each class of employes inside and outside of mines

Names of Operators and Collieries	County	Inside											Outside									Grand total inside and outside
		Mine foremen	Assistant mine foremen	Fire bosses and assistants	Miners	Miners' laborers	Drivers and runners	Doorboys and helpers	Pumpmen	Company men	All other employes	Total inside	Superintendents	Foremen	Blacksmiths and carpenters	Engineers and firemen	Slate pickers (boys)	Slate pickers (men)	Bookkeepers and clerks	All other employes	Total outside	
Susquehanna Coal Co.																						
Colliery No. 5,	Luzerne,....	3	2	12	264	247	123	36	8	32	114	841	....	1	26	71	79	19	6	189	391	1,232
Colliery No. 6,		1	3	7	266	219	126	1	4	27	99	753	....	1	28	46	84	1	6	185	351	1,104
Colliery No. 7,		1	5	10	243	236	91	34	10	73	118	821	1	1	33	50	62	14	5	169	335	1,156
Totals,	....	5	10	29	773	702	340	71	22	132	331	2,415	1	3	87	167	225	34	17	543	1,077	3,492
Delaware, Lackawanna and Western Railroad Co.																						
Auchincloss,	Luzerne,....	1	....	6	122	186	31	15	1	112	......	474	....	1	6	8	46	....	3	63	127	601
Truesdale,		2	....	3	115	244	17	15	6	48	46	496	....	2	9	21	21	6	3	105	167	663
Bliss,		1	1	6	195	207	54	10	3	116	33	626	....	1	8	12	45	4	4	105	179	805
Totals,	....	4	1	15	432	637	102	40	10	276	79	1,596	....	4	23	41	112	10	10	273	473	2,069
Lehigh and Wilkes-Barre Coal Co.																						
Sugar Notch No. 9,	Luzerne,....	1	1	6	220	180	43	43	3	84	5	586	....	1	6	12	28	....	3	62	112	698
Wanamie No. 18,		1	2	6	290	170	70	35	7	78	11	670	....	1	7	25	42	17	4	85	181	851
Totals,	....	2	3	12	510	350	113	78	10	162	16	1,256	....	2	13	37	70	17	7	147	293	1,549
West End Coal Co.																						
West End,	Luzerne,....	2	5	1	450	250	51	18	4	31	123	935	2	1	13	23	41	31	4	188	303	1,238
West End Washery,		....	....	....	......	......	......	......	......	......	......	......	....	1	....	....	....	....	....	14	15	15
Totals,	....	2	5	1	450	250	51	18	4	31	123	935	2	2	13	23	41	31	4	202	318	1,253

Alden Coal Co. Alden,	Luzerne,	1	1	5	178	178	51	39	3	.....	69	525	1	1	10	29	45	26	7	62	181	706
Pittston Coal Mining Co. Hadleigh,	Luzerne,	1	...	1	40	20	11	2	2	7	18	102	1	2	5	10	21	1	1	32	73	175
Lehigh Valley Coal Co. Warrior Run,	Luzerne,	1	2	....	47	35	11	6	6	......	41	149	....	1	6	9	12	....	3	54	85	234
Grand totals,		16	22	63	2,430	2,172	679	254	57	608	677	6,978	5	15	157	316	526	119	49	1,313	2,500	9,478

TABLE 3.—Part 2

Names of Operators and Collieries	County	Number of Days Worked in Breaker												
		January	February	March	April	May	June	July	August	September	October	November	December	Total
Susquehanna Coal Co.														
Colliery No. 5,	Luzerne,	21	15	22	20	22	20	20	23	23	21	19	24	250
Colliery No. 6,		19	13	22	19	22	21	24	24	23	21	21	23	252
Colliery No. 7,		19	15	21	21	22	20	23	23	22	23	19	23	251
Delaware, Lackawanna and Western Railroad Co.														
Auchincloss,	Luzerne,	20	16	19	18	18	17	19	16	17	19	17	18	214
Truesdale,		20	15	16	15	15	15	19	21	18	20	19	19	212
Bliss,		22	16	22	21	21	21	22	21	18	22	20	....	226
Lehigh and Wilkes-Barre Coal Co.														
Sugar Notch No. 9,	Luzerne,	....	....	20	22	22	20	20	19	21	15	23	22	204
Wanamie No. 18,		19	13	19	19	20	19	20	19	22	16	24	23	233
West End Coal Co.														
West End,	Luzerne,	23	19	21	20	21	21	23	23	21	23	21	21	257
Alden Coal Co.														
Alden,	Luzerne,	19	18	9	19	19	20	18	19	19	21	20	20	221
Pittston Coal Mining Co.														
Hadleigh,	Luzerne,	19	14	17	15	13	7	13	16	13	17	15	12	171
Lehigh Valley Coal Co.														
Warrior Run,	Luzerne,	7	15	12	14	12	19	12	12	12	16	14	15	160

TABLE 4.—Fatal accidents inside and outside of mines

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Number of widows	Number of orphans	Name of Mine	County	Nature and Cause of Accident in Brief
Jan.	9	David Jones,	Welsh,	Timberman,	47	M.	1	8	Wanamie,	Luzerne,	Fatally burned by powder. Outside.
	22	Albert Soutofskie,	Polish.	Laborer,	45	M.	1	3	No. 7 Colliery,		Instantly killed by fall of rock at face of his chamber in North Shaft, while assisting the miner to tamp a hole.
Feb.	8	Martin Savage,	Lithuanian,	Miner,	39	M.	1	3	Wanamie,		These seven persons worked in No. 5 lift off No. 3 Slope. When about 2.30 P. M. a fire in some unknown manner started at the foot of said slope; the smoke from same suffocated them when on their way to the manway leading to the surface.
	8	William Karpovage,	Polish,	Miner,	23	S.	....	....			
	8	Victor Slowtovash,	Polish,	Miner,	35	S.	....	....			
	8	Joseph Strenski,	Polish,	Miner,	29	S.	....	....			
	8	William Wosdilla,	Polish,	Laborer,	25	S.	....	....			
	8	George Vandermark,	American,	Driver,	20	S.	....	....			
	8	John Tershinski,	Polish,	Patcher,	17	S.	....	....			
	18	Steward Banks,	American,	Engineer,	23	M.	1	2	West End,		Fatally injured by being run over by mine cars. Outside.
	26	William Evans,	Welsh,	Timberman,	39	S.	....	....	Auchincloss,		Killed by being run over by cars.
	28	John Wublucki,	Polish,	Doortender,	21	S.	....	....	Bliss,		Killed by being run over by cars.
March	1	Stanley Yaskoviak,	Polish,	Bell boy,	18	S.	....	....	No. 5 Colliery,		Fatally squeezed between cars in No. 4 shaft.
	2	John Olefski,	Polish,	Laborer,	21	S.	....	....	Wanamie,		Fatally injured by fall of coal near face of his working place.
	25	David Thomas,	American,	Bell boy,	18	S.	....	....	Wanamie,		Killed by flying coal from runaway cars on slope.
	26	Joe Garvey,	Polish,	Miner,	30	M.	1	1	Sugar Notch,		Killed by fall of rock near face of his chamber.
April	1	Peter Gonas,	Austrian,	Rock dumper	21	S.	....	....	Truesdale,		Killed by being crushed between car and truck. Outside.
	23	Frank Rominski,	Polish,	Runner,	25	S.	....	....	Wanamie,		Killed by being pulled along the ground by a mule. Outside.
May	13	Anthona Shepanski,	Polish,	Doorboy,	16	S.	....	....	No. 7 Colliery,		Fatally injured by being run over by cars in North Shaft. Outside.
	16	Balthus Russel,	American,	Headman,	29	M.	1	2	West End,		Fatally squeezed between cars.
	23	W. H. McElhaney,	American,	Brakeman,	20	S.	....	....	No. 7 Colliery,		Fatally injured by falling under air locomotive in North Shaft.
	27	Michael Wyda,	American,	Miner,	26	M.	1	3	No. 6 Colliery,		Fatally burned by powder in No. 10 slope.
June	5	Benny Molefski,	Polish,	Miner,	23	S.	....	....	West End,		Fatally injured by fall of coal at face of chamber.

TABLE 4.—Continued

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Number of widows	Number of orphans	Name of Mine	County	Nature and Cause of Accident in Brief
June	13	David J. Gibbs, ...	American,...	Rock dumper	20	S.	....	....	No. 5 Colliery, ...	Luzerne,..	Fell under trip of cars and was fatally injured. Outside.
	26	Mike Mavinski, ...	Slavonian,...	Car loader,.	25	S.	....	....	No. 7 Colliery, ...		Fatally injured by falling under railroad car. Outside.
July	8	Ignas Letsetski, ...	Polish,.......	Miner, ...	54	M.	1	2	Bliss, ...		Killed by fall of rock.
	8	Anthony Grenefeski, ...	Polish,.......	Laborer, ...	22	S.	....	....	No. 6 Colliery, ...		Killed by fall of slate in No. 7 Shaft, at face of working place.
	13	Sidney Pratt, ...	American,...	Coupler, ...	16	S.	....	....	No. 7 Colliery, ...		Fatally burned by paint in North Shaft.
	17	Anthony Kornoski, ...	Lithuanian,.	Miner, ...	28	S.	....	....	Wanamie, ...		Fatally injured by fall of coal at face of working place.
	27	Andrew Havick, ...	Hungarian,..	Loader, ...	21	M.	1	....	Warrior Run, ...		Fatally injured by railroad cars. Outside.
Aug.	3	George Frilley, ...	Polish,.......	Laborer, ...	33	M.	1	3	No. 7 Colliery, ...		Killed by falling down shaft.
	7	Richard Millington, ...	English,.....	Miner, ...	47	M.	1	3	Wanamie, ...		Instantly killed by fall of rock at face of working place.
	12	Earnest Genthen, ...	English,.....	Co. Laborer,	33	M.	1	3	Bliss, ...		Electrocuted.
Sept.	14	Thomas Edwards, ...	Welsh,.......	Runner, ...	25	S.	....	....	Bliss, ...		Fatally squeezed between cars.
	18	Mike Rokashefski, ...	Polish,.......	Miner, ...	48	M.	1	3	West End, ...		Killed by fall of rock near face of working place.
	19	Frank Roak, ...	Polish,.......	Miner, ...	51	M.	1	....	No. 7 Colliery,.......		Fatally injured by a fall of rock in his chamber in South Shaft.
Oct.	4	Frank Yagoshufski,.....	Polish,.......	Doorboy, ...	17	S.	....	....	West End, ...		Killed by a fall of rock along No. 1 plane.
	4	Steve Admick, ...	Polish,.......	Doorboy, ...	17	S.	....	....	Truesdale, ...		Fatally injured by being squeezed between car and door.
	14	Stephen Maynard, ...	American....	Laborer, ...	62	S.	....	....	No. 5 Colliery, ...		Killed; run over by a mine car. Outside.
Nov.	5	William Evans, ...	American....	Engineer, ..	28	S.	....	....	North Shaft (No. 7 Colliery).		Fell under air locomotive.
	18	Stanley Charneski, ...	Polish........	Miner, ...	24	M.	1	....	Hadleigh, ...		Fell down shaft from Ross to Red Ash Vein.
	22	George Geneski, ...	Lithuanian,.	Doorboy, ...	16	S.	....	....	Sugar Notch, ...		Fatally injured by falling under car.
Dec.	1	Abraham Pesaneski, ...	Italian,......	Miner, ...	27	S.	....	....	West End, ...		Killed by fall of rock in his chamber.
	3	Anthony Posavich, ...	Lithuanian,.	Miner, ...	37	M.	1	6	Hadleigh, ...		Killed by fall of clod in his chamber.
	28	Thomas Long, ...	American, ..	Slatepicker,.	15	S.	....	....	Wanamie, ...		Fatally injured by falling a distance of 30 feet from platform in breaker. He was climbing around timber in breaker.

TABLE 5.—Non-fatal accidents inside and outside of mines

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Name of Mine	County	Nature and Cause of Accident in Brief
Jan.	4	Anthony Koval,	Polish,	Laborer,	22	S.	West End,	Luzerne,	Leg broken by fall of rock at face of chamber.
	5	Mike Lozofski,	Polish,	Miner,	37	M.	No. 6 Colliery,		End of thumb cut off by a fall of rock at face of his chamber.
	7	Charles Wagner,	Welsh,	Fireman,	36	M.	Hadleigh,		Arm broken by being struck by a valve which was blown off nipple on boiler.
	7	Sandy Shemanski,	Polish,	Slope headman,	21	S.	No. 7 Colliery,		Shin bone fractured by being struck by a car.
	9	John Macolona,	Polish,	Laborer,	19	S.	Wanamie,		Burned on hands and face by powder. Outside.
	9	Joe Boose,	Polish,	Laborer,	20	S.	Wanamie,		Burned on hands and face by powder. Outside.
	18	Frank Lewrick,	Italian,	Laborer,	23	S.	Wanamie,		While pushing car down the chamber he fell injuring his back.
	19	Anthony Ratski,	Polish,	Slatepicker,	14	S.	No. 7 Colliery,		While climbing down a ladder in breaker he fell and broke his leg.
	11	Frank Ryoblonski,	German,	Miner,	42	M.	No. 5 Colliery,		Body cut by flying coal from blast.
	26	Irven Keiner,	American,	Laborer,	24	S.	West End,		Fingers cut off by a piece of falling rock.
	28	Ignace Kopsnski,	Polish,	Miner,	25	M.	West End,		Face, hands and body cut by flying coal from a premature blast.
Feb.	8	David Parry,	American,	Doorboy,	17	S.	Wanamie,		Overcome by wood smoke.
	11	George Kramer,	German,	District Supt.,	45	M.	Wanamie,		Overcome by white damp.
	14	Wm. E. Walters,	Welsh,	Mine Foreman,	44	M.	Wanamie,		Leg broken by being struck by slope rope.
	26	Anthony Waskomiski,	Polish,	Miner,	46	M.	Auchincloss,		Hands and face burned by gas.
	26	Victor Rotekiewiz,	Polish,	Laborer,	28	S.	Auchincloss,		Hands and face burned by gas.
	26	Stanley Rotekiewiz,	Polish,	Laborer,	23	S.			
	26	Wadic Dolanavage,	Polish,	Laborer,	22	S.			
	28	Zigmont Zerliski,	Polish,	Miner,	26	S.	Alden,		Leg broken by fall of rock near face of chamber.
	28	Thomas Vail,	English,	Slope footman,	20	S.	Auchincloss,		Cut on head and nose broken by fall of rock.
March	5	Anthony Bamshefski,	Lithuanian,	Miner,	40	S.	Wanamie,		While standing a prop a piece of rock fell on him, breaking his collar bone.

TABLE 5.—Continued

Date of accident		Name of Person	Nationality	Occupation	Age	Married or sing'e	Name of Mine	County	Nature and Cause of Accident in Brief
March	7	John Kooshinski,	Lithuanian,	Miner,	52	M.	Wanamie,	Luzerne,	While on his way to work he fell on ice fracturing his arm. Outside.
	8	Philip Mead,	English,	Miner,	59	M.	No. 5 Colliery,		Back bruised and two ribs broken by fall of bone in No. 4 Slope.
	13	Anthony Cleary,	American,	Jig runner,	18	S.	Sugar Notch,		Toe crushed in jigs. Outside.
	15	Lewis Morgan,	American,	Laborer,	32	M.	Wanamie,		Leg crushed between engine and cars. Outside.
	20	John Savenia,	American,	Driver,	18	S.	Truesdale,		Squeezed between car and timber on gangway road.
	27	Daniel Dillon,	American,	Driver,	18	S.	Auchincloss,		Leg broken; squeezed between car and mule.
April	2	Frank Recleter,	Polish,	Laborer,	46	M.	No. 5 Colliery,		Leg cut off by mine cars at No. 4 shaft. Outside.
	4	Thos. Boyle,	American,	Engineer,	24	S.	No. 5 Colliery,		Squeezed between engine and cars. Outside.
	5	George Sands,	American,	Miner,	43	M.	West End,		Arm broken by flying coal from a blast in Long Drift.
	10	Anthony Levandwski,	Polish,	Miner,	50	M.	No. 5 Colliery,		Back injured and two ribs broken by fall of rock in No. 4 Slope.
	11	Stanley Ywastak,	Russian,	Laborer,	16	S.	West End,		Leg cut off by mine cars in Long Drift.
	13	Anthony Yarnick,	Polish,	Miner,	32	S.	North Shaft,		Body injured by fall of rock.
	16	Thomas Jynn,	English,	Slate picker,	15	S.	No. 7 Colliery,		Arm broken by falling off platform in breaker.
	16	William Tye,	English,	Team driver,	33	S.	No. 5 Colliery,		Squeezed between car and prop at No. 2 Shaft.
	19	Robert Murray,	Irish,	Breaker Boss,	35	M.	Sugar Notch,		Toe smashed by elevator. Outside.
	23	William Norman,	American,	Driver,	19	S.	Warrior Run,		Leg bruised by being squeezed under cars. Outside.
	29	Joseph Cominski,	Lithuanian,	Patcher,	19	S.	Sugar Notch,		Squeezed about the body by cars.
May	6	Loranzo Pwsino,	Italian,	Miner,	36	S.	No. 5 Colliery,		Two ribs fractured by fall of coal at No. 2 Shaft.
	13	Joseph Zeck,	American,	Miner,	66	M.	Alden,		Ribs fractured by being struck by fall of coal at No. 2 Shaft.
	14	Stanley Novak,	Polish,	Laborer,	30	M	No. 6 Colliery,		Stepped in front of moving car and had leg broken in No. 7 Shaft.

May	15	Joseph Tometshko,	Polish,	Car patcher,	30	M.	No. 5 Colliery,	Luzerne,	Foot crushed by railroad car passing over it. Outside.
	16	Alexander Ratski.	Polish,	Miner,	38	M.	Wanamie,		Thigh bone broken by flying coal from blast.
	23	John Rugns,	Polish,	Miner,	36	S.	Wanamie,		Head cut by flying coal from premature blast.
	25	Edward Young,	American,	Carpenter,	69	M.	No. 6 Colliery,		Body squeezed by cars. Outside.
	27	Stanley Adamovage,	Slavonian,	Laborer,	30	S.	No. 6 Colliery,		Finger cut off by car passing over it at No. 7 Shaft.
June	5	Henry Owens,	Welsh,	Surveyor,	24	S.	Wanamie,		Burned on hands and face by gas.
	10	Anthony Krevitzeski,	Polish,	Miner,	28	S.	No. 6 Colliery,		Cut on head and rib broken by fall of slate in No. 7 Shaft.
	18	Andrew Ravbellas,	Polish,	Doorboy,	18	S.	No. 7 Colliery,		Leg broken by being caught between cars in North Shaft.
July	13	Walter Cyphus,	American,	Driver,	22	S.	Warrior Run,		Kicked in face by mule.
	19	Stephen Reneka,	Slavonian,	Laborer,	34	M.	No. 7 Colliery,		Leg broken by piece of coal falling down chamber in North Shaft.
	26	Stanley Kellar,	Polish,	Laborer,	38	M.	No. 7 Colliery,		Leg fractured by fall of rock in North Shaft.
Aug.	2	Mike Marcofski,	Polish,	Driver,	17	S.	No. 7 Colliery,		Collar bone fractured; struck against door frame in North Shaft.
	6	William Thompson,	American,	Runner,	18	S.	Auchincloss,		Squeezed between car and door.
	7	Gabriel Comonco,	Polish,	Miner,	32	M.	Wanamie,		Hip and legs injured by fall of rock in face of his chamber.
	14	Peter Karcofski,	Polish,	Miner,	25	M.	No. 7 Colliery,		Leg broken by fall of bone in face of chamber in North Shaft.
	17	George Sovitch.	Lithuanian,	Miner,	35	S.	Bliss,		Hands and face slightly burned by gas.
	23	John Zortoski,	Polish.	Laborer,	43	M.	Bliss,		While standing on platform at foot of his chamber he fell off and received cut on head.
	27	Michael Poloch,	Slavonian,	Miner,	28	M.	Sugar Notch,		Leg broken by piece of coal sliding down chamber and striking him.
Sept.	7	Mathew Nash,	English,	Fire Boss,	48	M.	Auchincloss,		Leg broken on cage at top of shaft by reckless running of engine.
	9	Andrew Coffey,	Polish,	Miner,	48	M.	Wanamie.		Hip squeezed between car and rib.
	16	George Gmetz,	Slavonian,	Co. laborer,	24	M.	No. 5 Colliery,		Leg broken between car and rib No. 4 Slope.
	21	W. H. Morgan,	Welsh,	Bratticeman,	18	S.	No. 7 Colliery,		Ankle bone fractured by falling under car in South Shaft.
	27	Dennis Moore,	American,	Driver,	23	M.	Warrior Run,		Body squeezed between cars.
Oct.	8	John Barrick,	Polish,	Laborer,	18	S.	Glen Lyon No. 6,		Leg broken by being run over by car. Outside.
	8	Barney Malonski,	Polish,	Miner,	39	M.	Bliss,		Leg fractured by piece of coal in pitch chamber.
	12	W. T. Evans,	Welsh,	Miner,	52	M.	Auchincloss,		Two ribs broken by a rush of coal in pitch chamber.
	18	Isaac Humphreys,	American,	Engineer,	36	M.	No. 5 Colliery,		Leg broken and body bruised by fall of rock in No. 2 Shaft at face of chamber.
	30	John Dobzinski,	Polish,	Driver,	19	S.	No. 7 Colliery,		Fell beside trip of cars and broke his leg in South Shaft.
Nov.	8	John Rogden,	Polish,	Laborer,	22	S.	No. 7 Colliery,		Thumb cut off by piece of rock falling on it in South Shaft.
	13	John O'Morris.	Welsh,	Footman,	21	S.	Warrior Run,		Arm fractured; squeezed between car and roof.

TABLE 5.—Continued

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Name of Mine	County	Nature and Cause of Accident in Brief
Nov.	13	Stanley Kowalski, ...	Polish,.......	Mason helper,...	51	M.	No. 5 Colliery, ...	Luzerne,..	Leg fractured; piece of bone fell on it in No. 2 Shaft.
	18	William Erd, ...	German,.....	Laborer, ...	44	M.	Truesdale, ...		Arm fractured and side injured by rush of coal.
	25	George Snyder, ...	Slavonian,...	Miner, ...	40	M.	No. 5 Colliery, ...		Leg broken and back injured by a fall of rock in No. 4 Slope.
	27	John Olenek, ...	Slavonian,...	Driver, ...	23	M.	West End, ...		Leg broken by falling under car.
	27	Casper Cusovitz, ...	Polish,.......	Miner, ...	34	M.	Wanamie, ...		Compound fracture of leg and cut on arm by fall of coal.
	30	William Blazus, ...	Polish,.......	Driver, ...	17	S.	Auchincloss, ...		Collar bone broken; squeezed between car and rib.
Dec.	3	Stanley Romovitch, ...	Polish,.......	Miner, ...	30	M.	Sugar Notch, ...		Rib broken by fall of rock.
	3	Edward Roginski, ...	American,...	Coupler, ...	17	S.	No. 7 Colliery, ...		Foot injured by being run over by cars in North Shaft.
	6	Anthony Kreisick, ...	Austrian,....	Brakeman, ...	25	S.	Truesdale, ...		Chest and spinal column injured by being run over by cars. Outside.
	9	Brunis Kovaeski, ...	Polish,.......	Driver, ...	17	S.	No. 6 Colliery, ...		Leg broken by being struck by cars in No. 7 shaft.
	11	James Sullivan, ...	American,...	Fire Boss, ...	31	M.	Wanamie No. 18, ...		Hands and face burned by gas.
	30	Martin Renoldo, ...	Italian,......	Laborer, ...	18	S.	West End, ...		Leg broken by being run over by cars. Outside.

FATAL ACCIDENTS

Cars

February 18, West End Colliery, Steward Banks, American, engineer, was fatally injured. He attempted to board a moving car on dirt plane, missed his footing and fell under the car.

February 26, Auchincloss Colliery, D. L. and W. R. R. Co., William Evans, Welsh, timberman, was killed by cars. He was sitting on the bumper of a car when a slight explosion occurred in the vicinity. The concussion of the explosion caused the car to move and it passed over Evans killing him.

February 28, Bliss Colliery, D. L. and W. R. R. Co., John Wublucki, Polish, door boy, was killed by cars. He was about to open his door to allow a trip of cars to pass, when the trip struck the door and threw him down. The cars ran over him killing him instantly.

March 1, No. 4 Shaft, Susquehanna Coal Company, Stanley Yaskoviak, Polish, bell-boy, was killed by cars. While standing between two trips of cars, one of the cars jumped the track and squeezed him against the other trip, killing him instantly.

March 25, Truesdale Colliery, D. L. and W. R. R. Co., David Thomas, American, bell-boy, was instantly killed by flying coal from runaway cars on the Mills vein slope.

April 1, Truesdale Colliery, D. L. and W. R. R. Co., Peter Gonas, Austrian, rock dumper, was killed by being squeezed between car and truck.

May 13, No. 7 Colliery, Susquehanna Coal Company, Anthona Shepanski, Polish, door-boy, was fatally injured by being run over by cars. He fell under the trip while it was passing through his door.

May 16, West End Colliery, West End Coal Company, Balthus Russel, American, headman, was fatally squeezed between two trips of cars. He was hitching the slope rope on the rear end of a trip when another trip came up and caught him, fatally squeezing him.

May 23, No. 7 Colliery, Susquehanna Coal Company, W. H. McElhaney, American, brakeman, while riding on an air locomotive in some unknown manner fell in front of the locomotive and was killed.

June 13, No. 5 Colliery, Susquehanna Coal Company, David J. Gibbs, American, rock dumper, while riding on a trip of mine cars, fell under the cars and was fatally injured.

June 26, No. 7 Colliery, Susquehanna Coal Company, Mike Mavinski, Slavonian, car loader, was fatally injured by falling under a railroad car.

July 27, Warrior Run Colliery, Lehigh Valley Coal Company, Andrew Havick, Hungarian, loader, while dropping a loaded car down loaded track at breaker, fell under the car and was fatally injured.

September 14, Bliss Colliery, D. L. and W. R. R. Co., Thomas Edwards, Welsh, runner, was killed by cars. He was running a car down an airway road and walking behind it. He failed to hear another car that was following, and when the cars bumped he was caught between them.

October 4, Truesdale Colliery, D. L. and W. R. R. Co., Steve Admick, Polish, door boy, in the Mills seam slope, was fatally injured by cars. He blocked his door open and walked out the gangway road a few hundred feet and jumped on the front end of a trip of cars that was being pushed in by an electric motor. In the meantime the block fell away from the door and it closed, and he was fatally injured between the door and the cars.

October 14, No. 5 Colliery, Susquehanna Coal Company, Stephen Maynard, American laborer, while riding on the front end of a mine car fell in front of it and was killed.

November 5, North Shaft, No. 7 Colliery, Susquehanna Coal Company, William Evans, American, engineer, was killed by cars. While running an air locomotive the charging valve blew out, and he fell in front of the locomotive and was killed.

November 22, Sugar Notch Colliery, Lehigh and Wilkes-Barre Coal Company, George Geneski, Lithuanian, doorboy, was fatally injured by falling under a trip of moving cars.

Suffocation by Smoke

February 8,Martin Savage, Lithuanian, miner, William Karpovage, Polish, miner, Victor Slowtovash, Polish, miner, Joseph Streski, Polish, miner, William Wosdilla, Polish, laborer, George Vandermark, American, driver, and John Tershinski, Polish, patcher, were suffocated by smoke in No. 3 Slope, Wanamie Colliery, of the Lehigh and Wilkes-Barre Coal Company. About 2 o'clock in the afternoon of February 8, a miner named Morris Hontz started from his working place in the Red Ash vein, 5th West, of the surface, and after walking out of the gangway about 2,000 feet he discovered considerable smoke in the ingoing current. He immediately returned to notify the men inside of the existing danger, after which he and several others started for the surface and reached it safely.

By this time David Parry, a door-boy in No. 4 Lift East Side, discovered the smoke in the intake and ran a distance of about 4,000 feet to notify the men in that section that the mine was on fire. All of the men reached the surface safely. For this act Mr. Parry deserves much credit. When he reached the air he fell exhausted and for some months was in a critical condition.

Several of the men who were suffocated, according to Mr. Hontz's testimony, said that they would go out after they had changed their shoes, put their tools away, finished loading a car, etc. Consequently when they did start the smoke was so dense that they could not reach the manway leading to the second opening.

The fire started in the neighborhood of No. 5 Lift, Red Ash vein. As soon as it was discovered several of the employes in that vicinity worked heroically to extinguish it. After a few hours' work it was decided to seal off and flood that section. This was done and the fire was extinguished, and that section of the mine is now being re-opened.

At the inquest to inquire into the foregoing accident, conducted by D. W. Dodson, Coroner, at Wanamie, February 19, the following verdict was rendered:

"We, the Jury, find that Geo. Vandermark and his six companions came to their death on February 8, 1907, at Wanamie, from being suffocated by smoke in No. 3 Slope of No. 19 Colliery, Lehigh and Wilkes-Barre Coal Company. The evidence shows that the said deceased and his six companions were given timely warning that a fire was raging in the slope, and that the persons giving the said warning escaped to a place of safety.

We also find that the said Company has complied fully with the requirements of the Mine Law relating to a second opening.

PETER EATON,
OSWALD ROGERS,
JOSEPH EVANS, JR.,
JOHN KOSKER,
RICHARD R. JONES,
W. J. BURNETT,
Jurors."

Powder

January 9, Wanamie Colliery, Lehigh and Wilkes-Barre Coal Company, David Jones, Welsh, timberman, was fatally burned by powder. While he was riding on a trip of empty mine cars from No. 18 Wanamie to No. 19, a miner threw a keg of powder into the car in which he sat, and the powder in some unknown manner ignited.

May 27, No. 6 Colliery Susquehanna Coal Company, Michael Wyda, American, miner, was fatally burned by powder while preparing a charge.

Falling Down Shafts

November 18, Hadleigh Colliery, Pittston Coal Mining Company, Stanley Charneski, Polish, miner, was killed by falling down shaft. While running around the shaft at the Ross vein landing he ran into the shaft and fell to the bottom, a distance of about 175 feet.

August 3, North Shaft, No. 7 Colliery, Susquehanna Coal Company, George Frilley, Polish, laborer, was killed by falling down shaft. He and nine other men boarded a cage at the top of the shaft. The signals were given to the engineer to lower them to the bottom, but instead of doing that he raised them to the sheave and Frilley fell off the cage into the shaft.

Electricity

August 12, Bliss Colliery, D. L. and W. R. R. Co., Earnest Gethen, English, company laborer, while standing in an empty car near the foot of the Bliss Shaft, touched an electric wire and was instantly killed.

Mules

April 23, Wanamie Colliery, Lehigh and Wilkes-Barre Coal Company, Frank Rominski, Polish, runner, was dragged by a mule a distance of several hundred feet and killed. In attempting to get on mule his foot was caught in the trace chains.

Miscellaneous

July 13, North Shaft, Susquehanna Coal Company, Sidney Pratt, American, coupler, was fatally burned by paint while descending the shaft. He had a pail of paint and it is said some person on the cage held his lighted lamp too close to the paint and ignited it.

CONDITION OF COLLIERIES

SUSQUEHANNA COAL COMPANY

No. 5 Colliery.—Ventilation good, roads and drainage fair. Condition as to safety good.

No. 6 Colliery.—Ventilation fair, roads and drainage good. Condition as to safety good.

No. 7 Colliery.—Ventilation good, roads and drainage good. Condition as to safety good.

DELAWARE, LACKAWANNA AND WESTERN RAILROAD COMPANY

Auchincloss Colliery.—Ventilation good, roads and drainage good. Condition as to safety good.

Bliss Colliery.—Ventilation good, roads and drainage good. Condition as to safety good.

Truesdale Colliery.—Ventilation good, except in Truesdale tunnel, where it is only fair, roads and drainage fair. Condition as to safety good.

LEHIGH AND WILKES-BARRE COAL COMPANY

Wanamie Colliery.—Ventilation good, roads and drainage good. Condition as to safety good.

Sugar Notch Colliery.—Ventilation good, roads and drainage good. Condition as to safety good.

WEST END COAL COMPANY

West End Colliery.—Ventilation fair, roads and drainage fair. Condition as to safety good.

ALDEN COAL COMPANY

Alden Colliery.—Ventilation good, roads and drainage fair. Condition as to safety good.

PITTSTON COAL MINING COMPANY

Hadleigh Colliery.—Ventilation fair, roads and drainage fair. Condition as to safety good.

LEHIGH VALLEY COAL COMPANY

Warrior Run Colliery.—Ventilation fair, roads and drainage fair. Condition as to safety good.

IMPROVEMENTS

SUSQUEHANNA COAL COMPANY

Colliery Number 5, Outside

One new steam locomotive, 10½x16″, to haul coal from Nos. 4 and 5 shafts to breaker.

Inside

No. 2 Shaft.—1 new air locomotive, 6x10″, with air line installed in new Twin seam.

New slope in 3d lift, Ross seam, 135 yards.

One new engine 8x10″ to above slope.

No. 8 Tunnel extension to connect No. 2 shaft with No. 4 slope, 380 yards.

No. 4 Slope.—New plane No. 16, Mills to George seam, 149 yards.

New tunnel, Lower to Upper George seam, 11 yards.

No. 4 Shaft.—Slope No. 2 Ross seam from No. 2 tunnel, 118 yards.

One 8x10″ engine for No. 2 Slope.

Second opening No. 2 plane to air shaft.

No. 5 Shaft.—Rock Slope No. 1 from Forge to Forge seam, 207 yards.

One 8x10″ engine for No. 1 Slope.

Colliery Number 6, Outside

One new head frame for No. 6 shaft.

One steam locomotive 10x14″.

One electric hoist No. 10 Slope, 50 H. P.

One new concrete engine house.

One 5 foot diameter Capell fan driven by electric motor, No. 10 Slope and No. 1 Drift.

One new electric power plant and concrete building.

One new trestle, head No. 10 Slope.

Inside

Two new electric motors, No. 10 Slope and No. 1 Drift.

New plane, Twin Seam No. 6 Tunnel, 88 yards.

No. 6 Slope.—Tunnel Ross to Rider seam, 50 yards.

No. 10 Slope.—Bottom Ross seam, 322 yards.

Colliery Number 7, Outside

New coal pockets.

New addition to breaker and machinery.

One new air compressor, 16x11½″x5⅝″x22″x24″.

Inside

No. 30 Tunnel from top of No. 7 Plane to Hillman seam, 119 yards.

New slope, Forge Seam, 73 yards.

One 8x10″ engine.

One new air motor, 6x10″, with air line.

DELAWARE, LACKAWANNA AND WESTERN RAILROAD COMPANY

Auchincloss Colliery.—One 7x12 horizontal rock tunnel from Mills vein to Mills vein across the basin.

One 7x12 rock tunnel from Baltimore vein to Baltimore vein across basin on 5 per cent. grade.

One 7x12 rock tunnel from Baltimore vein to Ross vein 680 feet long, parallel with No. 5 tunnel, for ventilation and transportation.

Several other short rock tunnels were driven through faults and disturbances for ventilation and transportation, etc.

The work of installing a creosoting plant on the outside, for treating mine timber, will be completed early during the year 1908.

Bliss Colliery.—The Bliss breaker is undergoing a general overhauling and the work is now being completed. The extensive repairs that are being made are expected to be in shape to permit the operation of the colliery by February 1, 1908.

A 200 H. P. induction motor and electric hoist has been installed at Espy tunnel, Red Ash vein slope. This slope has been abandoned for many years and is now being pumped out with the intention of mining the balance of the coal in this territory.

The work of developing Twin vein has been started. Several rock tunnels have been driven from the Ross vein to the Twin vein.

One 7x12 rock tunnel has been driven from Ross vein to within 300 feet of Baltimore vein. This work will be completed early in the year 1908.

Wooden or combustible shanties and engine house pump rooms have been disposed of at this colliery and are being replaced with concrete and steel ones.

Truesdale Colliery.—Work of sinking slope from surface to Local basin, Mills vein, is under way and should be completed early in the year 1908.

A 200 H. P. electric hoist has been installed on Mills vein slope and is in operation.

The work of installing 5 stage centrifugal pump, electrically driven, is about complete. The building for this pump is made entirely of concrete, steel and brick, and will be lighted by electricity throughout.

Two rock tunnels from shaft level gangway No. 2 Shaft, 7x12, have been driven to the south basin from Ross vein to Red Ash vein. Equally distant between these there is one 7x12 tunnel being driven north from Ross vein to Forge vein. A concrete and steel room has been erected near the foot of the shaft for emergency hospital purposes.

A 200 H. P. electrically driven hoist is now being installed in No. 4 Slope No. 2 Shaft.

Two electric locomotives have been installed in these shafts and this has done away with all the mules formerly used.

Slopes are being sunk in the same with as much speed as possible for the development of this important colliery.

Operations were begun on the location of this plant, May 4, 1903, at a place known as Luzerne Grove, which was then practically a wilderness.

The development and growth of this colliery have been phenomenal during the year 1907. There were nearly 300,000 tons of coal mined at this plant.

LEHIGH AND WILKES-BARRE COAL COMPANY

Sugar Notch Number 9 Colliery, Outside

Timber saw mill,
Engines for No. 5 Plane.

Inside

Rock plane airway, Baltimore to Cooper.
Tunnel, Baltimore to Ross.

Wanamie Number 18 Colliery, Outside

416 H. P. water tube boilers, No. 19 Slope.

Inside

No 20 Tunnel, Ross to Baltimore.
No. 19 Tunnel, Baltimore to Ross.
No. 8 Tunnel extended to Cooper.

ALDEN COAL COMPANY

Alden Colliery.—A new Vulcan locomotive was installed and is running between No. 2 Shaft and the breaker.

Tunnel from Cooper to Hillman vein, 100 feet long.

Air shaft from surface to Cooper vein.

A tunnel from Cooper to Hillman vein 275 feet long.

An air compressor, 22x30x20x20, and a Jeanesville compound pump, 18x28x12x18, have been installed.

PITTSTON COAL MINING COMPANY

Hadleigh Colliery.—One 300 horse power water tube boiler and boiler house.

No. 2 Williams crusher, and 180 H. P. crusher engine installed during the year.

Eleventh District

LUZERNE AND CARBON COUNTIES

Hazleton, Pa., February 20, 1908.

Hon. James E. Roderick, Chief of Department of Mines:

Sir: I have the honor of transmitting herewith my annual report as Inspector of Mines for the Eleventh Anthracite District, for the year ending December 31, 1907.

Respectfully submitted,

DAVID J. RODERICK,

Inspector.

SUMMARY OF STATISTICS

Number of collieries,	21
Number of mines,	64
Number of mines in operation,	60
Number of tons of coal shipped to market,	4,069,846
Number of tons used at mines for steam and heat,	605,504
Number of tons sold to local trade and used by employes,	116,945
Number of tons produced,	4,792,295
Number of tons produced by compressed air machines,	——
Number of tons produced by electrical machines,	——
Number of persons employed inside of mines,	6,953
Number of persons employed outside,	4,036
Number of fatal accidents inside of mines,	25
Number of fatal accidents outside,	9
Number of non-fatal accidents inside of mines,	84
Number of non-fatal accidents outside,	22
Number of tons of coal produced per fatal accident inside,	191,692
Number of persons employed per fatal accident inside,	278
Number of persons employed per fatal accident outside,	448
Number of persons employed per non-fatal accident inside,	83
Number of persons employed per non-fatal accident outside,	183
Number of wives made widows,	21
Number of children orphaned,	48
Number of steam locomotives used inside of mines,	10
Number of steam locomotives used outside,	80
Number of compressed air locomotives used inside,	12
Number of electric motors used inside,	5
Number of fans in use,	38
Number of furnaces in use,	1
Number of gaseous mines in operation,	26
Number of non-gaseous mines in operation,	34
Number of new mines opened,	2
Number of old mines abandoned,	2

TABLE A

PRODUCTION OF COAL

Names of Operators	Tons
G. B. Markle and Company,	981,956
Coxe Brothers and Company, Incorporated,	798,547
Lehigh Valley Coal Company,	795,278
A. Pardee and Company,	549,048
Pardee Brothers and Company,	543,976
Harwood Coal Company,	268,363
Upper Lehigh Coal Company,	255,494
C. M. Dodson and Company,	206,862
John S. Wentz and Company,	135,332
Hazle Mountain Coal Company,	130,291
M. S. Kemmerer and Company,	74,379
Pond Creek Coal Company,	42,274
Stauffer and Rowe,	8,332
Thomas R. Reese and Son,	2,163
Total,	4,792,295

Production by Counties

Luzerne,	4,653,673
Carbon,	138,622
Total,	4,792,295

TABLE B—Fatal and non-fatal accidents inside and outside of mines; number of tons of coal produced per accident; number of persons employed; number employed per accident

Names of Operators	Fatal Accidents			Non-fatal Accidents			Tons of coal produced per fatal accident inside	Tons of coal produced per non-fatal accident inside	Number of employes inside	Number of employes outside	Total number of employes	Number of employes inside per fatal accident	Number of employes outside per fatal accident	Number of employes inside per non-fatal accident	Number of employes outside per non-fatal accident
	Inside	Outside	Total	Inside	Outside	Total									
G. B. Markle and Co.,	6	....	6	10	1	11	163,659	98,195	1,226	491	1,717	204	....	123	491
Coxe Brothers and Co., Inc.,	3	1	4	9	5	14	266,183	88,727	958	521	1,479	319	521	107	105
Lehigh Valley Coal Co.,	1	....	1	21	5	26	795,278	37,870	1,389	744	2,133	1,389	....	66	149
A. Pardee and Co.,	5	2	7	8	1	9	109,810	68,631	947	423	1,370	189	211	118	423
Pardee Brothers and Co.,	3	1	4	13	3	16	181,325	41,844	781	476	1,257	261	476	61	159
Harwood Coal Co.,	2	2	4	9	....	9	134,181	29,819	391	295	686	195	148	43	....
Upper Lehigh Coal Co.,	2	....	2	3	3	6	127,747	85,165	297	353	650	149	....	99	118
C. M. Dodson and Co.,	2	2	4	2	1	3	103,431	103,431	322	236	558	161	118	161	236
John S. Wentz and Co.,	....	....	....	3	....	3	....	45,111	198	178	376	....	....	66	....
Hazle Mountain Coal Co.,	....	....	....	2	1	3	....	65,146	203	158	361	....	....	102	158
M. S. Kemmerer and Co.,	1	....	1	3	1	4	74,379	24,793	132	96	228	132	....	44	96
Pond Creek Coal Co.,	....	1	1	1	....	1	....	42,274	82	52	134	....	52	82	....
Thomas R. Reese and Son,	....	....	....	....	1	1	....	....	6	3	9	....	....	....	3
Miscellaneous companies,	....	....	....	....	....	....	....	....	21	10	31	....	....	....	....
Totals and averages for district,	25	9	34	84	22	106	191,692	57,051	6,953	4,036	10,989	278	448	83	183

TABLE C.—Classification of Fatal Accidents Inside and Outside of Mines

	Months													
	January	February	March	April	May	June	July	August	September	October	November	December	Totals	Percentages
Cause of Accidents Inside														
Falls of coal,	....	...	....	....	....	....	2	....	1	....	....	....	3	12.00
Falls of slate,	...	...	1	....	....	1	....	1	1	....	1	....	5	20.00
Falls of roof,	2	1	....	....	....	....	1	....	....	....	....	....	4	16.00
Mine cars,	3	...	....	1	....	....	....	....	2	....	....	1	7	28.00
Explosions of powder and dynamite,	...	...	...	....	1	....	....	....	....	....	....	....	1	4.00
Premature blasts,	...	...	1	....	....	....	1	....	....	....	....	....	2	8.00
Falling into slopes, etc.,	...	...	....	....	....	....	....	....	....	....	1	....	1	4.00
Miscellaneous,	...	1	....	....	....	....	....	....	....	....	1	....	2	8.00
Totals,	5	2	2	1	1	1	4	1	4	....	3	1	25	100.00
Causes of Accidents Outside														
Cars,	...	...	1	1	....	1	....	....	1	1	....	....	5	55.56
Machinery,	...	...	....	....	1	....	....	1	1	....	...	....	3	33.33
Miscellaneous,	...	...	....	....	....	....	....	....	....	....	1	....	1	11.11
Totals,	....	....	1	1	1	1	....	1	2	1	1	....	9	100.00
Grand totals inside and outside,	5	2	3	2	2	2	4	2	6	1	4	1	34	

TABLE D.—Classification of Non-fatal Accidents Inside and Outside of Mines

	Months													
	January	February	March	April	May	June	July	August	September	October	November	December	Totals	Percentages
Causes of Accidents Inside														
Falls of coal,	...	...	3	2	....	....	3	1	...	....	...	3	12	14.28
Falls of slate,	1	2	....	1	....	2	1	2	3	2	2	....	16	19.05
Falls of roof,	...	1	...	1	....	....	...	....	....	....	....	....	2	2.38
Mine cars,	2	2	....	3	1	1	1	4	3	3	1	....	21	25.00
Explosions of gas and dust,	...	...	3	3	....	...	....	....	1	3	....	1	11	13.10
Explosions of powder and dynamite,	2	...	...	....	....	....	...	....	....	....	...	....	2	2.38
Premature blasts,	...	3	....	3	1	...	....	1	1	....	1	1	11	13.10
Falling into slopes, etc.,	...	...	...	....	....	....	....	....	....	1	....	....	1	1.19
Mules,	...	...	...	....	....	....	...	....	....	....	1	....	1	1.19
Miscellaneous,	...	1	3	....	1	....	....	....	1	1	...	....	7	8.33
Totals,	5	9	9	13	3	3	5	8	9	10	5	5	84	100.00
Causes of Accidents Outside														
Cars,	...	...	1	1	....	....	2	2	....	....	...	2	8	36.36
Machinery,	...	1	1	....	....	...	2	....	1	....	1	...	6	27.28
Miscellaneous,	1	...	....	....	1	1	...	...	2	1	1	1	8	36.36
Totals,	1	1	2	1	1	1	4	2	3	1	2	3	22	100.00
Grand totals inside and outside,	6	10	11	14	4	4	9	10	12	11	7	8	106	

TABLE E.—Occupations of Persons Killed or Fatally Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Inside													
Miners,	....	1	1	1	1	1	3	....	1	....	2	....	11
Miners' laborers,	2	1	1	....	....	....	1	1	1	....	....	....	7
Drivers and runners,	3	....	....	....	....	....	....	....	2	....	....	1	6
All other employes,	....	....	....	....	....	....	....	....	....	....	1	....	1
Totals,	5	2	2	1	1	1	4	1	4	....	3	1	25
Outside													
Slatepickers (boys),	....	....	....	....	1	...	....	....	1	....	....	....	2
All other employes,	....	....	1	1	....	1	....	1	1	1	1	....	7
Totals,	...	...	1	1	1	1	...	1	2	1	1	....	9
Grand totals inside and outside,	5	2	3	2	2	2	4	2	6	1	4	1	34

TABLE F.—Occupations of Persons Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Inside													
Miners,	3	7	7	10	1	1	1	5	5	5	3	5	53
Miners' laborers,	....	1	1	1	2	1	3	2	1	4	....	....	16
Drivers and runners,	1	....	....	....	....	1	....	1	2	1	2	....	8
Pumpmen,	1	....	...	...	....	....	....	....	....	....	....	....	1
Company men,	....	....	....	1	....	....	1	....	....	....	....	....	2
All other employes,	....	1	1	1	....	....	....	....	1	....	....	....	4
Totals,	5	9	9	13	3	3	5	8	9	10	5	5	84
Outside													
Engineers and firemen,	....	....	1	....	....	....	....	....	1	....	....	....	2
Slatepickers (boys),	....	....	....	....	....	....	1	....	1	....	1	....	3
All other employes,	1	1	1	1	1	1	3	2	1	1	1	3	17
Totals,	1	1	2	1	1	1	4	2	3	1	2	3	22
Grand totals inside and outside,	6	10	11	14	4	4	9	10	12	11	7	8	106

TABLE G.—Nationality of Persons Killed or Fatally Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
American,	1	1	1	....	2	1	....	....	3	....	1	1	11
Scotch,	....	1	....	....	....	....	....	....	....	....	....	....	1
German,	1	....	....	....	....	....	....	....	....	1	....	....	2
Polish,	2	....	....	....	....	1	....	....	1	....	....	....	4
Hungarian,	....	....	1	1	....	....	1	1	2	....	2	....	8
Italian,	1	....	....	....	....	....	....	1	....	....	1	....	3
Slavonian,	....	....	1	1	....	....	....	....	....	....	....	....	2
Lithuanian,	....	....	....	....	....	....	1	....	....	....	....	....	1
Russian,	....	....	....	....	....	....	1	....	....	....	....	....	1
Montenegrian,	....	....	....	....	....	....	1	....	....	....	....	....	1
Totals,	5	2	3	2	2	2	4	2	6	1	4	1	34

TABLE H.—Nationality of Persons Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
American,	2	1	4	3	1	1	3	2	3	1	1	3	25
Scotch,	....	1	....	....	....	....	....	....	....	....	....	....	1
Irish,	....	....	1	2	....	....	....	....	....	1	1	2	7
German,	....	....	....	....	....	1	....	....	1	....	....	....	2
Polish,	2	2	....	1	....	1	....	1	7	2	1	2	19
Hungarian,	1	3	1	1	1	....	2	2	1	....	1	....	13
Italian,	....	1	1	3	....	....	3	2	....	3	2	....	15
Slavonian,	1	1	1	1	....	....	1	1	....	....	1	....	7
Lithuanian,	....	....	2	1	2	....	....	1	....	....	....	....	6
Austrian,	....	1	1	....	....	1	....	....	....	4	....	....	7
Russian,	....	....	....	2	....	....	....	....	....	....	....	....	2
Tyrolean,	....	....	....	....	....	....	....	1	....	....	....	1	2
Totals,	6	10	11	14	4	4	9	10	12	11	7	8	106

TABLE I.—Operators and mines, kind of openings, type and size of fans, size of furnaces, volume of air produced by fan or furnace per minute, number of splits of air currents, and number of persons employed inside

Names of Operators and Mines	Kind of opening	Gaseous or non-gaseous	Method of ventilation	Diameter of fan in feet	Width of blades in feet	Depth of blades in feet	Number of revolutions per minute	Water gauge developed—in inches	Name of fan	Power used	Area of furnace bars in square feet	Number of splits of air currents	Number of cubic feet of air per minute entering the mine at inlet	Total quantity of air per minute circulating in all the splits in cubic feet	Number of persons employed inside
G. B. Markle and Co.															
Jeddo Colliery:															
Jeddo No. 4,	Slope,	Gaseous,	Fan,	24	7.1	6.3	84	2	Guibal,	Steam,		9	76,534	70,102	309
Ebervale,	Slope,	Non-gas.	Fan,	16	4.5	4.6	75	.5				7	51,000	42,060	121
Highland Colliery:															
Highland No. 5,	Slope,	Gaseous,	Fan,	16	4.5	4.6	70	1.5	Guibal,	Steam,			80,120	36,050	319
Highland No. 2,	Slope,	Gaseous,	Fan,	16	4.5	4.6	70	.5				4	60,000	50,000	211
Highland No. 6,	Slope,	Non-gas.	Fan,	16	4.5	4.6	60	1				3	34,705	19,259	42
Coxe Brothers and Co., Inc.															
Drifton Colliery:															
Drifton No. 1,	Slope,	Non-gas.	Fan,	16	4	4	60		Guibal,	Steam,		4	38,000	30,000	73
Drifton No. 2,	Slope,	Gaseous,	Fan,	20	4	5.6	80		Guibal,	Steam,		7	156,300	140,000	189
Deringer Colliery:															
Tomhicken,	Drift,	Non-gas.	Furnace,								14	1	8,200	4,800	23
Deringer,	Slope,	Gaseous,	Fan,	20	6	5.6	90		Guibal,	Steam,		9	63,400	50,900	115
Gowen No. 1,	Tunnel,	Non-gas.	Fan,	16	4	4	100		Guibal,	Steam,		8	64,366	44,000	89
Gowen No. 4,	Slope,	Gaseous,	Fan,	20	7	6	95		Guibal,	Steam,		8	57,700	41,600	68
Lehigh Valley Coal Co.															
Hazleton Shaft Colliery:															
Hazleton,	Shaft,	Gaseous,	Fan,	20	1	6	65	.55	Guibal,	Steam,		10	114,400	76,900	278
Hazleton No. 3,	Slope,	Gaseous,	Fan,	17	5	6	65	.50	Guibal,	Steam,		4	39,000	23,000	104
Hazleton No. 5,	Slope,	Gaseous,	Fan,	14	4.9	4	98	.55	Guibal,	Steam,		6	52,500	43,000	175
Stockton No. 2,	Slope,	Non-gas.	Fan,	17	5		65	.50					37,120	15,830	26

Hazleton No. 1 Colliery:															
Hazleton No. 1,	Slope,	Gaseous,	Fan,	20	6	6	62	.80	Guibal,	Steam,	......	9	105,330	38,130	134
Hazleton No. 8,	Slope,	Gaseous,	Fan,	16	4	4.6	50	.65	Guibal,	Steam,	......	6	44,310	23,499	83
Hazleton No. 1, Fager Ridge,	Shaft,	Non-gas.	Fan,	16	5	5.6	65	.35	Guibal,	Steam,	......	*	....	....	......
Spring Brook Colliery:															
Spring Brook No. 1,	Slope,	Gaseous,	Fan,	16	4	4	60	.30	Guibal,	Steam,	......	5	40,000	18,500	68
Spring Brook No. 2,	Slope,	Gaseous,	Fan,	14	4.9	4	70	.30	Guibal,	Steam,	......	4	34,000	23,100	82
A. Pardee and Co.															
Cranberry Colliery:															
Cranberry No. 1, North,	Slope,	Gaseous,	Fan,	16	4	4	70	.9	Guibal,	Steam,	......	8	100,000	87,000	124
Cranberry No. 1, South,	Slope,	Gaseous,	Fan,	16	4.1	4	78	.8			......	8	75,000	46,000	131
Cranberry No. 4,	Slope,	Gaseous,	Fan,	16	4.9	4	60	.7			......	10	60,000	45,000	110
Cranberry No. 4,	Drift,	Non-gas.	Fan,	16	4.9	4	60	.7			......	1	6,000	3,000	8
Cranberry No. 5,	Slope,	Gaseous,	Fan,	16	4.6	4	80	.4			......	6	28,000	20,000	80
Cranberry No. 6,	Slope,	Non-gas.	Fan,	16	4.6	4	60	.8			......	4	54,070	15,094	66
East Crystal Ridge,	Slope,	Non-gas.	Fan,	16	4.6	4	60	.8			......	6	82,740	42,020	63
Pardee Brothers and Co.															
Lattimer Colliery:															
Lattimer No. 1,	Slope,	Gaseous,	Fan,	16	4.6	4.3	66	1.3	Guibal,	Steam,	......	2	64,800	48,000	97
Lattimer No. 2,	Slope,	Gaseous,	Fan,	16	4.6	4.3	66	1.3			......	3	57,975	35,000	86
Lattimer No. 9,	Slope,	Gaseous,	Fan,	16	4.6	4.3	66	1.3			......	3	35,000	28,000	......
Harwood Coal Co.															
Harwood Colliery:															
Harwood No. 4,	Slope,	Non-gas.	Fan,	16	4.6	4.3	72	.2	Guibal,	Steam,	......	6	48,000	35,800	177
Harwood No. 5,	Slope,	Gaseous,	Fan,	16	4.6	4.3	72	.2							
Harwood No. 10,	Slope,	Non-gas.	Fan,	16	4.6	4.3	72	.1							
Harwood No. 9,	Slope,	Non-gas.	Fan,	16	4.6	4.3	72	.2							
C. M. Dodson and Co.															
Beaver Brook Colliery:															
Beaver Brook No. 10,	Slope,	Gaseous,	Fan,	16	4.6	5	70	......	....	....	......	4	46,000	35,000	164
Beaver Brook No. 11,		Gaseous,	Fan,	16	4.6	5	80	......	....	....	......	3	40,000	30,000	60
Beaver Brook No. 12,		Non-gas.	Fan,	16	4.6	5	70	......	....	....	......	4	....	....	......
Beaver Brook No. 15,		Gaseous,	Fan,	16	4.6	5	80	......	....	....	......	2	....	....	......
John S. Wentz and Co.															
Hazle Brook Colliery:															
Hazle Brook No. 3,	Slope,	Non-gas.	Natural,	......	......	......	......	......	....	....	......	1	20,000	8,000	31
Hazle Brook No. 5,		Gaseous,	Natural,	......	......	......	......	......	....	....	......	1	21,000	9,000	24
Hazle Brook No. 6,		Gaseous,	Natural,	......	......	......	......	......	....	....	......	2	40,000	10,000	44
Hazle Brook No. 8,		Non-gas.	Natural,	......	......	......	......	......	....	....	......	2	30,000	9,000	40
Hazle Mountain Coal Co.															
Hazle Mountain Colliery:															
Hazle Mountain No. 1,	Slope,	Non-gas.	Fan,	16	6	5	60	.5	Guibal,	Steam,	......	5	42,000	20,800	98
Hazle Mountain No. 4,		Non-gas.	....	......	......	......	......	......	....	....	......	2	8,000	5,000	12
Hazle Mountain No. 5,		Non-gas.	....	......	......	......	......	......	....	....	......	2	12,000	9,000	40
Pond Creek Coal Co.															
Pond Creek Colliery:															
Pond Creek No. 7,	Slope,	Non-gas.	Natural,	......	......	......	......	......	....	....	......	2	10,760	6,000	24

*Robbing, no air measurements taken. 12 mines, natural ventilation, not included. 7 mines where robbing is being done, no air measurements taken.

TABLE 1.—Operators, location of collieries, railroads, etc.

Names of Operators and Collieries	County	Name of General Superintendent	Post Office	Name of Superintendent	Post Office	Railroad to Mine
G. B. Markle and Co.						
Jeddo No. 4 and Ebervale, Highland No. 5. Highland Nos. 1, 2 and 6,	Luzerne,	Jno. Markle, Managing partner,	Jeddo,	J. T. Keith,	Jeddo,	Lehigh Valley
Coxe Brothers and Co., Inc.						
Drifton Nos. 1 and 2, Eckley, Buck Mountain and Stockton, Deringer, Gowen and Tomhicken,	Luzerne,	S. D. Warriner,	Wilkes-Barre,	W. H. Davies,	Hazleton,	Lehigh Valley
Lehigh Valley Coal Co.						
Hazleton Shaft,	Luzerne.	S. D. Warriner,	Wilkes-Barre,	W. H. Davies,	Hazleton,	Lehigh Valley
Hazleton No. 1,	Luzerne,					
Spring Brook,	Carbon,					
A. Pardee and Co.						
Cranberry,	Luzerne,	Frank Pardee,	Hazleton,			Lehigh Valley
Pardee Brothers and Co.						
Lattimer,	Luzerne,	A. W. Drake,	Lattimer Mines,	George Barager,	Lattimer Mines,	Lehigh Valley
Harwood Coal Co.						
Harwood,	Luzerne,	A. W. Drake,	Lattimer Mines,	George Barager,	Lattimer Mines,	Lehigh Valley
Upper Lehigh Coal Co.						
Upper Lehigh,	Luzerne,	A. C. Leisenring,	Upper Lehigh,			C. R. R. of N. J.
C. M. Dodson and Co.						
Beaver Brook,	Luzerne,	E. L. Bullock,	Audenried,	John J. Turnbach,	Audenried,	L. V. and C. R. R. of N. J.
John S. Wentz and Co.						
Hazle Brook,	Luzerne,	John Weber,	Hazle Brook,			Lehigh Valley
Hazle Mountain Coal Co.						
Hazle Mountain,	Luzerne,	W. R. McTurk,	Philadelphia,	W. A. Fuller,	Hazleton,	Lehigh Valley
M. S. Kemmerer and Co.						
Sandy Run,	Luzerne,	M. S. Kemmerer,	Upper Lehigh,	George D. Kuegler,	Sandy Run,	C. R. R. of N. J.

Pond Creek Coal Co. Pond Creek,	Luzerne,	W. G. Thomas,	Hazleton,	I. D. Thomas,	Zehner, P. O.,	L. V. and C. R. R. of N. J.
Stauffer and Rowe Rowe,	Luzerne,	James Rowe,	Hazleton,			Lehigh Valley
Thomas R. Reese and Son Dusky Diamond,	Luzerne,	Thos. R. Reese,	Audenried,			L. V. and C. R. R. of N. J.
Black Creek Coal Co. Harleigh,*	Luzerne,	W. G. Thomas,	Hazleton,			Lehigh Valley

*Idle.

TABLE 2.—Number of tons of coal mined, number of days worked, number of persons employed, number killed and injured, quantity of powder and dynamite used, etc.

Names of Operators and Collieries	County	Number of tons of coal shipped to market	Number of tons used at collieries for steam and heat	Number of tons sold to local trade and used by employes	Total production of coal in tons	Number of days worked	Number of employes	Number of fatal accidents	Number of non-fatal accidents	Number of kegs of powder used	Number of pounds of dynamite used	Number of horses and mules
G. B. Markle and Co.												
Jeddo No. 4 and Ebervale,	Luzerne,	369,761	45,260	1,429	416,450	161	749	3	5	1,301	165,499	121
Highland No. 5,		275,031	26,280	....	301,311	157	497	1	3	5,407	63,099	63
Highland Nos. 1, 2 and 6,		205,406	52,372	6,417	264,195	215	471	2	3	1,142	70,399	71
Totals,		850,198	123,912	7,846	981,956	....	1,717	6	11	7,850	298,997	255
Coxe Brothers and Co., Inc.												
Drifton Nos. 1 and 2,	Luzerne,	295,015	54,548	4,801	354,364	253	577	2	2	4,528	28,959	52
Deringer, Gowen and Tomhicken,		222,383	31,771	4,282	258,436	257	539	1	8	5,404	29,950	64
Eckley, Buck Mountain and Stockton,		154,737	30,178	832	185,747	234	363	1	4	1,576	34,992	49
Totals,		672,135	116,497	9,915	798,547	....	1,479	4	14	11,508	93,901	165
Lehigh Valley Coal Co.												
Hazleton Shaft,	Luzerne,	346,758	50,361	10,789	407,908	220	965	1	16	9,803	126,553	61
Hazleton No. 1,	Luzerne,	184,391	21,207	43,150	248,748	201	668	....	6	5,617	63,525	57
Spring Brook,	Carbon,	116,216	21,085	1,321	138,622	209	500	....	4	2,933	36,482	43
Totals,		647,365	92,653	55,260	795,278	....	2,133	1	26	18,353	226,560	161
A. Pardee and Co.												
Cranberry,	Luzerne,	486,028	56,855	6,165	549,048	245	1,370	7	9	10,715	149,325	242
Pardee Brothers and Co.												
Lattimer,	Luzerne,	465,237	65,600	13,139	543,976	248	1,257	4	16	3,905	260,817	121

Harwood Coal Co. Harwood,	Luzerne,	223,320	36,500	8,543	268,363	248	686	4	9	2,248	86,701	71
Upper Lehigh Coal Co. Upper Lehigh,	Luzerne,	218,472	29,476	7,546	255,494	238	650	2	6	2,848	57,697	81
C. M. Dodson and Co. Beaver Brook,	Luzerne,	172,596	33,376	890	206,862	207	558	4	3	4,795	21,125	59
John S. Wentz and Co. Hazle Brook,	Luzerne,	113,744	20,629	959	135,332	196	376	....	3	1,160	39,400	34
Hazle Mountain Coal Co. Hazle Mountain,	Luzerne,	114,791	15,000	500	130,291	247	361	....	3	1,500	45,000	37
M. S. Kemmerer and Co. Sandy Run,	Luzerne,	64,707	8,274	1,398	74,379	249	228	1	4	1,431	15,565	26
Pond Creek Coal Co. Pond Creek,	Luzerne,	35,943	6,000	331	42,274	176	134	1	1	103	23,400	10
Stauffer and Rowe Rowe,	Luzerne,	5,310	532	2,490	8,332	247	31	....	....	110	500	7
Thomas R. Reese and Son Dusky Diamond,	Luzerne,	....	200	1,963	2,163	222	9	....	1	60	50	2
Grand totals,	....	4,069,846	605,504	116,945	4,792,295	....	10,989	34	106	66,586	1,319,038	1,271

TABLE 2.—Part 2

Names of Operators	County	Number of Boilers					Locomotives			Number of steam engines of all classes	Total horse power	Number of pumps delivering water to surface	Capacity in gallons per minute	Quantity delivered to surface per minute—gallons	Number of electric dynamos	Number of air compressors
		Cylindrical	Horse power	Tubular	Horse power	Total horse power	Steam	Air	Electric							
G. B. Markle and Co.,	Luzerne,	.....	....	55	9,210	9,210	12	6	1	104	7,732	10	11,678	10,021	3	8
Coxe Brothers and Co., Inc.,	Luzerne,	9	330	50	9,400	9,730	16	6	......	59	5,495	20	15,800	8,750	1	4
Lehigh Valley Coal Co.,	Luzerne and Carbon,	19	570	41	6,200	6,770	13	......	4	99	8,575	19	17,660	9,300	2	5
A. Pardee and Co.,	Luzerne,	32	960	16	4,080	5,040	11	......	......	67	18,240	15	23,100	7,600	......	1
Pardee Brothers and Co.,		.....	....	17	3,281	3,281	11	......	......	28	3,335	†	....	....	1	3
Harwood Coal Co.,		.....	....	12	1,800	1,800	4	......	......	29	1,325	7	7,600	4,000	1	1
Upper Lehigh Coal Co.,		50	1,610	20	2,610	4,220	8	......	......	53	1,319	12	13,500	5,500	......	1
C. M. Dodson and Co.,		20	300	18	2,214	2,514	1	......	......	27	1,160	8	10,640	5,160	1	......
John S. Wentz and Co.,		.....	....	9	1,300	1,300	6	......	......	11	800	4	3,600	2,500	......	1
Hazle Mountain Coal Co.,		.....	....	8	1,160	1,160	5	......	......	13	750	5	3,880	1,690	......	......
M. S. Kemmerer and Co.,		6	240	4	380	620	1	......	......	10	385	1	3,000	1,000	......	......
Pond Creek Coal Co.,		.....	....	7	900	900	2	......	......	7	225	3	1,500	1,000	......	1
Stauffer and Rowe,		.....	....	2	60	60	......	......	......	3	50	....	....	....	......	......
Thomas R. Reese and Son,		.....	....	1	90	90	......	......	......	2	60	....	....	....	......	......
Black Creek Coal Co.,*		.....	....	6	600	600	......	......	......	3	150	2	1,363	895	......	......
Totals,	....	136	4,010	266	43,285	47,295	90	12	5	515	49,601	106	113,321	57,416	9	25

*Idle during year.
†Jeddo tunnel drainage.

TABLE 3.—Number of each class of employes inside and outside of mines

Names of Operators and Collieries	County	Inside											Outside									Grand total inside and outside
		Mine foremen	Assistant mine foremen	Fire bosses and assistants	Miners	Miners' laborers	Drivers and runners	Doorboys and helpers	Pumpmen	Company men	All other employes	Total inside	Superintendents	Foremen	Blacksmiths and carpenters	Engineers and firemen	Slate pickers (boys)	Slate pickers (men)	Bookkeepers and clerks	All other employes	Total outside	
G. B. Markle and Co.																						
Jeddo No. 4 and Ebervale, ...	Luzerne, ..	2	5	....	221	128	33	4	1	36	131	561	1	1	16	22	23	12	2	111	188	749
Highland No. 5, ...		1	3	....	119	121	28	4	1	24	47	348	1	1	12	17	19	6	2	91	149	497
Highland Nos. 1, 2 and 6, ...		2	2	....	104	110	22	5	11	23	38	317	1	1	10	26	13	12	2	89	154	471
Totals, ...	....	5	10	....	444	359	83	13	13	83	216	1,226	3	3	38	65	55	30	6	291	491	1,717
Coxe Brothers and Co., Inc.																						
Drifton Nos. 1 and 2, ...	Luzerne, ..	3	4	....	181	14	32	6	6	11	117	374	...	1	11	30	15	28	6	112	203	577
Deringer, Gowen and Tomhicken,		2	5	....	202	25	34	4	10	8	72	362	...	2	16	31	16	20	6	86	177	539
Eckley, Buck Mountain and Stockton.		2	5	....	95	32	29	......	1	2	56	222	...	2	10	22	10	20	4	73	141	363
Totals, ...	....	7	14	....	478	71	95	10	17	21	245	958	...	5	37	83	41	68	16	271	521	1,479
Lehigh Valley Coal Co.																						
Hazleton Shaft, ...	Luzerne, ...	4	6	....	347	61	30	3	7	......	236	694	...	1	14	30	48	9	4	165	271	965
Hazleton No. 1, ...	Luzerne, ...	3	5	....	215	20	16	9	4	......	176	448	...	1	13	13	40	8	4	141	220	668
Spring Brook, ...	Carbon, ...	2	2	....	112	57	19	......	12	43	......	247	...	2	20	27	6	16	3	179	253	500
Totals, ...	....	9	13	...	674	138	65	12	23	43	412	1,389	...	4	47	70	94	33	11	485	744	2,133
A. Pardee and Co.																						
Cranberry, ...	Luzerne, ...	6	4	7	390	299	80	46	13	42	60	947	...	2	37	55	44	30	3	252	423	1,370
Pardee Brothers and Co.																						
Lattimer, ...	Luzerne, ...	2	12	1	390	160	55	8	....	52	101	781	3	4	24	41	68	32	8	296	476	1,257

TABLE 3.—Continued

Names of Operators and Collieries	County	Inside											Outside									Grand total inside and outside
		Mine foremen	Assistant mine foremen	Fire bosses and assistants	Miners	Miners' laborers	Drivers and runners	Doorboys and helpers	Pumpmen	Company men	All other employes	Total inside	Superintendents	Foremen	Blacksmiths and carpenters	Engineers and firemen	Slate pickers (boys)	Slate pickers (men)	Bookkeepers and clerks	All other employes	Total outside	
Harwood Coal Co. Harwood, ...	Luzerne, ...	1	5	1	160	120	37	......	8	31	28	391	3	2	19	30	25	22	5	189	295	686
Upper Lehigh Coal Co. Upper Lehigh, ...	Luzerne, ...	2	3	....	127	92	37	4	4	12	16	297	1	6	8	33	69	83	3	150	353	650
C. M. Dodson and Co. Beaver Brook, ...	Luzerne, ...	1	2	2	114	116	35	8	5	14	25	322	1	1	11	14	28	29	4	148	236	558
John S. Wentz and Co. Hazle Brook, ...	Luzerne, ...	1	2	....	82	35	24	......	6	26	22	198	...	1	12	18	15	15	2	115	178	376
Hazle Mountain Coal Co. Hazle Mountain, ...	Luzerne, ...	1	3	....	95	63	15	1	4	12	9	203	1	2	5	22	30	5	3	90	158	361
M. S. Kemmerer and Co. Sandy Run, ...	Luzerne, ...	1	....	....	61	46	12	......	1	11	......	132	1	1	7	12	16	40	2	17	96	228
Pond Creek Coal Co. Pond Creek, ...	Luzerne, ...	1	....	....	35	21	13	......	2	6	4	82	1	1	4	13	9	3	2	19	52	134
Stauffer and Rowe Rowe, ...	Luzerne, ...	1	....	....	10	8	2	......	....	......	......	21	1	1	1	1	4	1	....	1	10	31
Thomas R. Reese and Son Dusky Diamond, ...	Luzerne, ...	1	....	....	2	3	......	......	....	......	......	6	....	....	......	2	......	......	....	1	3	9
Grand totals, ...	....	39	68	11	3,062	1,531	553	102	96	353	1,138	6,953	15	33	250	459	498	391	65	2,325	4,036	10,989

TABLE 3.—Part 2

Names of Operators and Collieries	County	Number of Days Worked in Breaker												
		January	February	March	April	May	June	July	August	September	October	November	December	Total
G. B. Markle and Co.														
Jeddo No. 4 and Ebervale,	Luzerne,	13	12	15	15	15	14	12	12	11	13	15	14	161
Highland No. 5,		13	11	14	14	14	13	13	13	12	13	13	14	157
Highland Nos. 1, 2 and 6,		19	17	18	18	18	18	17	18	16	18	19	19	215
Coxe Brothers and Co., Inc.														
Drifton Nos. 1 and 2,	Luzerne,	23	19	20	22	22	23	22	22	15	22	21	22	253
Deringer, Gowen and Tomhicken,		23	20	20	22	20	22	21	23	22	22	21	21	257
Eckley, Buck Mountain and Stockton,		18	16	15	20	18	18	21	24	21	21	20	22	234
Lehigh Valley Coal Co.														
Hazleton Shaft,	Luzerne,	20	15	17	20	17	19	19	20	20	20	18	15	220
Hazleton No. 1,	Luzerne,	22	18	19	22	19	22	20	21	18	20	....	....	201
Spring Brook,	Carbon,	18	15	17	20	17	19	19	19	15	16	18	16	209
A. Pardee and Co.														
Cranberry,	Luzerne,	20	17	21	21	21	21	22	20	20	20	21	21	245
Pardee Brothers and Co.														
Lattimer,	Luzerne,	21	20	20	22	22	22	18	21	20	21	21	20	248
Harwood Coal Co.														
Harwood,	Luzerne,	21	18	18	23	20	21	22	22	21	22	21	19	248
Upper Lehigh Coal Co.														
Upper Lehigh,	Luzerne,	22	20	18	21	20	19	16	19	19	23	21	20	238
C. M. Dodson and Co.														
Beaver Brook,	Luzerne,	20	17	15	15	17	18	18	18	17	17	17	18	207
John S. Wentz and Co.														
Hazle Brook,	Luzerne,	17	15	14	17	19	18	17	17	16	17	18	11	196

TABLE 3.—Part 2—Continued

Names of Operators and Collieries	County	Number of Days Worked in Breaker												
		January	February	March	April	May	June	July	August	September	October	November	December	Total
Hazle Mountain Coal Co. Hazle Mountain,	Luzerne,	24	19	21	20	20	21	19	21	21	22	20	19	247
M. S. Kemmerer and Co. Sandy Run,	Luzerne,	22	22	22	22	22	20	20	19	18	22	21	19	249
Pond Creek Coal Co. Pond Creek,	Luzerne,	13	12	15	16	16	12	14	16	17	18	14	13	176
Stauffer and Rowe Rowe,	Luzerne,	25	21	21	20	20	20	20	20	20	20	20	20	247
Thomas R. Reese and Son Dusky Diamond,	Luzerne.	24	23	24	....	....	9	26	15	24	27	25	25	222

TABLE 4.—Fatal accidents inside and outside of mines

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Number of widows	Number of orphans	Name of Mine	County	Nature and Cause of Accident in Brief
Jan.	12	John Dailey, ...	American, ..	Laborer, ...	22	S.	....	....	Lattimer, ...	Luzerne,..	Fatally injured by fall of roof in gangway.
	12	Michael Seamone, ...	Italian,......	Laborer, ...	43	M.	1	3	Lattimer, ...		Instantly killed by fall of roof in gangway.
	18	Fred Fensick, ...	Polish, ...	Driver, ...	40	M.	1	7	Cranberry, ...		Fatally injured by being caught by door and thrown under car.
	21	Herman Gross, ...	German,.....	Driver, ...	18	S.	....	....	Upper Lehigh, ...		Instantly killed between car and prop on gangway.
	29	Joe Lawrence, ...	Polish, ...	Driver, ...	21	S.	....	....	Hazleton Shaft, ...		Fatally injured between cars at top of counter chute.
Feb.	19	Joseph Smith, ...	American, ..	Miner, ...	48	M.	1	1	Upper Lehigh, ...		Instantly killed by fall of roof on gangway.
	22	William Watson, ...	Scotch, ...	Laborer, ...	58	M.	1	....	Ebervale, ...		Fatally injured by timber falling on him.
March	6	George Andruseck, ...	Slavonian, .	Topman, ..	56	M.	1	....	Harwood, ...		Fatally injured by car on top of slope. Outside.
	22	Thomas Michael, ...	American, ..	Miner, ...	52	M.	1	1	Cranberry, ...		Instantly killed by blast while tamping hole.
	23	Steve Sarcovitch, ...	Hungarian,	Laborer, ...	43	M.	1	3	Beaver Brook, ...		Instantly killed by fall of slate in breast.
April	12	James Small, ...	Hungarian,	Laborer ,...	40	S.	...	....	Beaver Brook, ...		Fatally injured between draw bridge and car. Outside.
	13	Joseph Yenshaw, ...	Slavonian, .	Miner, ...	35	M.	1	2	Jeddo, ...		Instantly killed by cars on gangway.
May	17	Edward Baker, ...	American, ..	Miner, ...	44	M.	1	3	Cranberry, ...		Instantly killed by explosion of dynamite.
	21	Walter Williams, ...	American, ..	Jig runner,	17	S.	....	....	Beaver Brook, ...		Instantly killed by machinery in breaker. Outside.
June	22	Joseph Smith, ...	Polish, ...	Coal loader,	20	S.	....	....	Pond Creek, ...		Fatally injured by gondola below breaker. Outside.
	28	Christopher Miller, ...	American, ..	Miner, ...	39	M.	1	....	Sandy Run, ...		Instantly killed by fall of slate in breast.
July	2	Adam Tremas, ...	Russian, ...	Miner, ...	29	S.	....	....	Cranberry, ...		Instantly killed by blast in breast.
	10	Peter Obloczinski, ...	Lithuanian,	Miner, ...	36	M.	1	2	Lattimer, ...		Fatally injured by fall of coal in breast.
	23	John Slank, ...	Hungarian,	Miner, ...	30	M.	1	2	Highland No. 2, ..		Instantly killed by fall of coal in breast.
	29	Steve Vukitch, ...	Montenegrian,	Laborer, ...	30	M.	1	....	Harwood, ...		Instantly killed by fall of roof in gangway.
Aug.	8	John Sundry, ...	Hungarian,	Laborer, ...	27	M.	1	....	Jeddo, ...		Instantly killed by fall of slate in breast.

TABLE 4.—Continued

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Number of widows	Number of orphans	Name of Mine	County	Nature and Cause of Accident in Brief
Aug.	30	Ernest Pasquale,	Italian,	Watchman,	25	M.	1	2	Lattimer,	Luzerne,	Instantly killed by machinery in breaker. Outside.
Sept.	5	Dennis Connors,	American,	Driver,	17	S.	....	....	Cranberry,		Instantly killed by cars on gangway.
	11	Hugh Campbell,	American,	Runner,	20	S.	....	....	Drifton,		Instantly killed by cars on gangway.
	11	Michael Wasko,	Hungarian,	Miner,	34	M.	1	3	Eckley,		Instantly killed by fall of coal in gangway.
	20	Joseph Peshock,	Polish,	Laborer,	23	S.	....	....	Highland No. 2,		Instantly killed by fall of slate in breast.
	20	Antonio Buongari,	American,	Slatepicker,	15	S.	....	....	Cranberry,		Fatally injured by gondola above breaker. Outside.
	24	John Titsco,	Hungarian,	Screen tender,	20	S.	....	....	Drifton,		Instantly killed by machinery in breaker. Outside.
Oct.	26	Frank Vaupel,	German,	Ashman,	63	M.	1	....	Cranberry,		Instantly killed by being run over by locomotive. Outside.
Nov.	8	Dominick Camerano,	Italian,	Miner,	43	M.	1	8	Highland No. 5,		Fatally injured by falling down breast manway.
	8	Joseph Mattis,	Hungarian,	Teamster,	45	M.	1	8	Harwood,		Fatally injured by mule tramping on him. Outside.
	12	Meinard Wargo,	Hungarian,	Miner,	46	M.	1	3	Beaver Brook,		Fatally injured by fall of slate in breast.
	25	Joseph Cornby,	American,	Hitcher,	19	S.	....	....	Harwood,		Fatally injured by being struck by piece of plank, loosened by a runaway car down slope when rope broke.
Dec.	27	John Houser,	American,	Driver,	34	M.	1	....	Deringer,		Instantly killed. Squeezed between car and rib of gangway.

TABLE 5.—Non-fatal accidents inside and outside of mines

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Name of Mine	County	Nature and Cause of Accident in Brief
Jan.	17	Mike Cepin,	Slavonian,	Miner,	26	M.	Harwood,	Luzerne,	Back injured by fall of slate.
	23	Joe Reganofsly,	Polish,	Miner,	27	M.	Hazleton No. 1,	Luzerne,	Face and hands burned by explosion of powder.
	23	Frank Zederosia,	Polish,	Miner,	26	S.	Hazleton No. 1,	Luzerne,	Face and hands burned by explosion of powder.
	23	Charles Cann,	American,	Pumpman,	34	M.	Spring Brook,	Carbon,	Internally injured by falling under car on slope.
	29	John Goleash,	Hungarian,	Driver,	18	S.	Upper Lehigh,	Luzerne,	Leg fractured by a car thrown on him by hoisting rope.
	30	Cornelius Boyle,	American,	Hitcher,	32	M.	Beaver Brook,	Luzerne,	Arm fractured and back injured by bridge weight falling on him. Outside.
Feb.	2	Michael Chroma,	American,	Jig runner,	18	S.	Hazle Mountain,	Luzerne,	Ankle dislocated by piece of machinery falling on it. Outside.
	5	Alexander Zambotti,	Austrian,	Miner,	29	M.	Gowen Nos. 1 and 3,		Foot injured by fall of roof.
	8	Joseph Peihota,	Polish,	Miner,	58	M.	Harwood,		Scalp wounded and face cut by flying coal from shot.
	9	Martin Vijda,	Slavonian,	Miner,	26	M.	Lattimer,		Head and face lacerated by flying coal from shot.
	12	John Evan,	Hungarian,	Miner,	30	M.	Upper Lehigh,		Head injured by fall of slate in gangway.
	12	John Levka,	Hungarian,	Laborer,	26	M.	Upper Lehigh,		Back injured by fall of slate in gangway.
	14	Vincenso Ciotola,	Italian,	Spragger,	17	S.	Lattimer,		Leg fractured by being caught between car and chain.
	16	Robert Monroe,	Scotch,	Miner,	61	M.	Spring Mountain,		Leg fractured by an air pipe falling on it.
	21	Mike Maskarinsky,	Hungarian,	Miner,	37	M.	Hazleton Shaft,		Leg fractured by a bar in car wheel catching him.
	25	Joseph Locohitus,	Polish,	Miner,	38	M.	Hazle Mountain,		Face and breast lacerated by flying coal from shot.
March	1	Benjamin Miller,	American,	Bottom man,	22	S.	Hazle Mountain,		Foot bruised. Struck by piece of coal that rolled down slope.
	7	Frank Katajnski,	Slavonian,	Miner,	38	M.	Beaver Brook,		Face and hands burned by explosion of gas in breast.
	8	Joseph Bilusko,	Austrian,	Miner,	43	M.	Lattimer,		Face and hands burned by explosion of gas in breast.

TABLE 5.—Continued

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Name of Mine	County	Nature and Cause of Accident in Brief
March	12	Thomas Aubrey,	American,	Engineer,	27	S.	Eckley,	Luzerne,	Compound fracture of arm. Struck by flying pieces of fly-wheel. Outside.
	16	Daniel Jones,	American,	Miner,	43	M.	Hazleton Shaft,		Face and hands slightly burned by explosion of gas.
	19	James McDermott,	Irish,	Miner,	51	M.	Eckley,		Shoulder blade fractured by fall of coal.
	21	Martin Cowish,	Lithuanian,	Miner,	39	M.	Harwood,		Small bone in leg fractured by falling while pushing buggy.
	23	John Wanew, Sr.,	Hungarian,	Miner,	52	M.	Beaver Brook,		Shoulder blade and two ribs fractured by fall of coal.
	25	Anthony Garish,	Lithuanian,	Miner,	40	M.	Hazleton Shaft,		Head and back bruised by fall of coal in breast.
	26	Toney Amata,	Italian,	Laborer,	58	M.	Lattimer,		Chest crushed and ribs fractured by falling under car. Outside.
	27	Andro Staffa,	American,	Laborer,	23	M.	Harwood,		Leg fractured by piece of slate sliding down on him.
April	5	Benjamin Moses,	American,	Roadman,	51	M.	Sandy Run,		Leg bruised. Caught between bumpers of cars.
	10	Frank Lapinski,	Russian,	Miner,	26	M.	Cranberry,		Eye blown out and face lacerated by flying coal from shot.
	10	David Green,	Russian,	Miner,	34	M.	Cranberry,		Face lacerated by flying coal from shot.
	13	Dominick Constantine,	Italian,	Miner,	26	S.	Lattimer,		Body injured by fall of coal in breast.
	16	John Evanko,	Hungarian,	Laborer,	37	M.	Sandy Run,		Leg fractured by fall of roof in gangway.
	16	Joe Gooditus,	Lithuanian,	Miner,	45	M.	Hazleton Shaft,		Squeezed about body by fall of coal in cross-cut.
	19	Harold Hall,	American,	Roadman,	17	S.	Lattimer,		Leg fractured. Caught between derailed car and timber.
	19	Frank Dominick,	Italian,	Laborer,	40	M.	Hazleton Shaft,		Skull fractured. Squeezed between gondola and chute. Outside.
	22	Cornelius Rodden,	Irish,	Miner,	58	M.	Cranberry,		Bruised about body by falling under cars on gangway.
	23	John Farnens,	Slavonian,	Miner,	33	M.	Hazleton Shaft,		Leg fractured by fall of slate in breast.
	25	William Gallagher,	Irish,	Miner,	55	M.	Cranberry,		Skull and leg fractured by flying coal from shot.

April	25	Joseph Tarono,	Italian,	Miner,	30	M.	Lattimer,	Luzerne,	Slightly burned by an explosion of gas in breast.
	25	Alexander Robisky,	Polish,	Miner,	32	S.			
	25	Harry Hall,	American,	Miner,	27	M.			
May	2	Adam Boyarskie,	Hungarian,	Topman,	40	M.	Hazleton No. 1,	Luzerne,	Concussion of brain. Kicked by mule. Outside.
	13	Andro Romoski,	Lithuanian,	Laborer,	26	S.	Harwood,		Leg fractured. Struck by hoisting rope on slope.
	16	James Ulshafer,	American,	Miner,	28	M.	Hazle Brook,		Face and arm lacerated by flying coal from shot.
	29	Felix Cirket,	Lithuanian,	Laborer,	29	S.	Harwood,		Leg fractured by tilted car falling on him.
June	4	Steve Shernego,	Polish,	Laborer,	34	M.	Hazleton Shaft,		Back bruised by fall of slate in breast.
	5	Peter Fisher,	American,	Driver,	17	S.	Cranberry,		Leg and shoulder blade fractured by falling under car.
	12	Daniel Faust,	German,	Loco-patcher,	17	S.	Lattimer,		Arm fractured by falling from top of car. Outside.
	27	John Zolo,	Austrian,	Miner,	30	M.	Lattimer,		Foot crushed by fall of slate in breast.
July	1	William Fultz,	American,	Laborer,	17	S.	Ebervale,		Arm crushed and body bruised by falling under car.
	2	Charles Sarlow,	Italian,	Laborer,	30	M.	Hazleton Shaft,		Face and scalp lacerated by fall of coal. Outside.
	11	Joe Shermarick,	Hungarian,	Miner,	34	M.	Spring Brook,	Carbon,	Leg fractured by fall of slate in breast.
	15	James Bell,	American,	Hitcher,	25	S.	Upper Lehigh,	Luzerne,	Foot injured by car on top of slope while unhitching. Outside.
	16	James Beam,	American,	Hitcher,	34	M.	Highland No. 2,		Leg crushed. Caught between car and prop at bottom of slope.
	22	John Halburak,	Slavonian,	Slatepicker,	14	S.	Sandy Run,		Toes crushed by getting his foot into pinion wheel. Outside.
	23	John Greshko,	Hungarian,	Laborer,	25	S.	Highland No. 2,		Face and head lacerated by fall of coal in breast.
	27	Joseph Guiffrida,	Italian,	Jig-runner,	19	S.	Lattimer,		Toes broken by machinery in breaker. Outside.
	29	Aniello Troccoli,	Italian,	Laborer,	32	M.	Lattimer,		Scalp lacerated and hip injured by fall of coal.
Aug.	2	John Cush,	Hungarian,	Laborer,	40	M.	Spring Mountain,		Arm bruised by fall of coal in gangway.
	6	Guy Ulshafer,	American,	Loco-patcher,	18	S.	Deringer,		Foot crushed by car running over it. Outside.
	6	Joe Sepoteskey,	Polish,	Miner,	31	M.	Jeddo,		Leg and pelvis fractured by fall of slate.
	7	Bartista Zibol,	Italian,	Miner,	26	S.	Hazleton Shaft,		Hip fractured by being squeezed between car and prop.
	8	Frank Dorshinko,	Hungarian,	Miner,	25	M.	Jeddo,		Ribs fractured by fall of slate in breast.
	12	John Rollin,	Lithuanian,	Miner,	33	M.	Hazleton Shaft,		Face, neck and hands lacerated by blast in gangway.
	12	Wassil Wannick,	Slavonian,	Oiler,	18	S.	Hazleton No. 1,		Knee squeezed between bumpers of cars. Outside.
	13	Charles Boyle,	American,	Driver,	24	S.	Pond Creek,		Concussion of brain. Thrown from car against top.
	22	Max Zambezzi,	Tyrolean,	Miner,	25	S.	Hazleton Shaft,		Arm bruised by being thrown from car against roof at foot of slope.
	22	Philip Patti,	Italian,	Laborer,	23	S.	Hazleton Shaft,		Fingers fractured by being thrown from car against roof at foot of slope.
Sept.	3	Victor Keinock,	Polish,	Driver,	20	S.	Hazleton Shaft,		Arm squeezed by being caught between lump of coal and roof.

TABLE 5.—Continued

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Name of Mine	County	Nature and Cause of Accident in Brief
Sept.	3	Fanster Horan,	German,	Jig-tender,	19	S.	Hazleton No. 1,	Luzerne,	Leg squeezed by machinery in breaker. Outside.
	3	Alex Onufro,	Polish,	Miner,	29	M.	Harwood,		Contusions of shoulder and leg by fall of slate in breast.
	7	Andro Ritsco,	Hungarian,	Fireman,	45	M.	Drifton,		Arm fractured by falling from ladder in boiler house. Outside.
	9	Martin Leshnock,	Polish,	Miner,	31	M.	Jeddo,		Leg fractured by flying coal from blast.
	10	Thomas Karpowitz,	Polish,	Slatepicker,	16	S.	Upper Lehigh,		Arm fractured by falling while playing in breaker. Outside.
	12	Henry Bankery,	American,	Headman,	19	S.	Deringer,		Collar bone fractured. Squeezed between car and rib of gangway.
	19	Mike Moran,	Polish,	Miner,	34	S.	Hazleton Shaft,		Head and back injured by fall of slate in heading.
	20	Fred Topka,	Polish,	Miner,	32	S.	Highland No. 2,		Body lacerated by fall of slate in breast.
	24	John Dostick,	Polish,	Laborer,	26	S.	Cranberry,		Nose fractured by falling between cars.
	25	Michael Henry,	American,	Miner,	40	M.	Cranberry,		Face and hands burned by explosion of gas in chute.
	26	Frank McCole,	American,	Driver,	22	S.	Highland No. 5,		Foot cut by falling against car wheel.
Oct.	3	Tug Horning,	American,	Driver,	16	S.	Cranberry,		Leg bruised by falling between cars.
	8	Frank Staforick,	Polish,	Miner,	27	M.	Hazleton Shaft,		Back injured by fall of slate in breast.
	19	Daniel Roarty,	Irish,	Car runner,	56	S.	Eckley,		Rib fractured by falling from car with rolling timber. Outside.
	21	George Kennedy,	Austrian,	Laborer,	35	M.	Hazleton No. 1,		Collar bone fractured by car door falling on him.
	22	Toney Cleary,	Italian,	Miner,	35	S.	Sandy Run,		Leg fractured by piece of slate striking him.
	24	Eugene Gioram,	Austrian,	Miner,	34	M.	Deringer,		Four toes crushed by fall of slate in breast.
	25	Steve Baronowski,	Polish,	Laborer,	24	S.	Harwood,		Hip dislocated. Caught between mine car and timber on slope.
	25	Thomas Schreibmiler,	Austrian,	Miner,	24	S.	Deringer,		Face and hands burned by explosion of gas in breast.
	28	Andrew Augusti,	Austrian,	Miner,	27	S.	Deringer,		Skull fractured by falling down breast manway.
	31	Antonia Carrato,	Italian,	Laborer,	26	S.	Lattimer,		Face and hands burned by explosion of gas in gangway.
	31	Carmine Bellucci,	Italian,	Laborer,	41	M.			

Nov.	2	Joseph Majlet,	Hungarian,	Driver,	18	S.	Gowen No. 4,	Luzerne,	Compound fracture of leg by mule falling on him.
	4	Stanley Wyzgaitys,	Polish,	Miner,	29	M.	Deringer,		Face and breast lacerated by premature explosion of blast.
	5	Frank Perry,	Italian,	Miner,	33	M.	Hazle Brook,		Leg fractured by fall of slate in breast.
	6	Anthony Sweeney,	Irish,	Driver,	21	S.	Hazle Brook,		Hips squeezed between car and platform on gangway.
	12	Joseph Lablack,	Italian,	Roll tender,	17	S.	Dusky Diamond,		Foot crushed by rolls in breaker. Outside.
	14	Leonard Ward,	American,	Slatepicker,	15	S.	Drifton,		Leg scalded by stepping into barrel of hot water. Outside.
	23	Charles Hebar,	Slavonian,	Miner,	34	M.	Hazleton Shaft,		Leg bruised by fall of slate in breast.
Dec.	3	Edward Matthews,	American,	Miner,	47	M.	Stockton,		Leg and wrist fractured by fall of coal in counter gangway.
	4	Anthony Kadashifski,	Polish,	Miner,	22	S.	Lattimer,		Face and hands lacerated by flying coal from shot.
	6	Frank McNelis,	Irish,	Coal loader,	35	M.	Jeddo,		Arm crushed by railroad cars near breaker. Outside.
	7	August Sowers,	American,	Oiler,	15	S.	Upper Lehigh,		Leg fractured by falling under car while pushing it. Outside.
	11	William Haase,	American,	Separator attendant,	16	S.	Cranberry,		Leg fractured by falling from ladder on breaker. Outside.
	13	Joseph Zanell,	Tyrolean,	Miner,	28	S.	Harwood,		Ribs fractured and lung punctured by fall of coal in breast.
	30	Con O'Donnell,	Irish,	Miner,	56	M.	Highland No. 5,		Face and hands slightly burned by explosion of gas in breast.
	30	Wasil Palacoskie,	Polish,	Miner,	31	S.	Highland No. 5,		Leg fractured by fall of coal in breast.

FATAL ACCIDENTS

Falls of Coal, Slate and Roof

January 12, Lattimer Colliery, John Dailey, American, laborer, and Michael Seamone, Italian, laborer, were killed by a fall of roof in gangway. They were loading a car near face of gangway, when a large piece of top rock fell and caught them. The miner was in the face of the gangway sinking a hole for a prop when the roof fell and he barely escaped with his life.

February 19, Upper Lehigh Colliery, Joseph R. Smith, American, miner, was instantly killed by a fall of roof. The evening of the accident he was running the engine that hoisted the coal from the underground slope and went down where the men were taking out pillars and was listening to the top working, along with the other men. The top began falling, and the men ran to a place of safety, and all escaped with the exception of Smith. His body was recovered after seventy-two hours of diligent work on the part of the rescuers.

March 23, Beaver Brook Colliery, Steve Sarcovitch, Hungarian, laborer, was fatally injured by a fall of slate in a breast. The miner had fired a hole in the bottom bench of coal which discharged a prop. Instead of replacing the prop, they were doing some other work when a mass of top slate fell on them.

June 28, Sandy Run Colliery, Christopher Millar, American, miner, was instantly killed by a fall of coal from pillar while putting his tools away preparatory to firing a blast in a heading that he was driving.

July 10, Lattimer Colliery, Peter Obloczinski, Lithuanian, miner, was fatally injured. He was in the act of barring down a piece of top coal, when it fell and struck him knocking him down the pitch. He died the same evening at the Hazleton Hospital. He should have stood in a safe place to bar.

July 23, Highland No. 2 Colliery, John Slank, Hungarian, miner, was fatally injured by a fall of top coal while taking out pillars.

July 29, Harwood Colliery, Steve Vukitch, Montenegrian, laborer, was instantly killed by a fall of roof in gangway. The miner, Thomas Kasick, was in the face of gangway and noticed some small pieces fall. He looked around and saw a flake of rock drawing from the top and he shouted to his laborer to look out, but he could not get out of the way before the rock caught him.

August 8, Jeddo No. 4 Colliery, John Sundry, Hungarian, laborer, was instantly killed and his miner, Frank Dorshinko, was seriously injured by a fall of slate while placing a prop under a dangerous roof to support it until they could put up a set of timber.

September 11, Eckley Colliery, Michael Wasko, Hungarian, miner, was instantly killed by a fall of coal in gangway. He, with his laborer, was working on the night shift. They had fired a shot on the upper rib and had returned to the face of the gangway. When the laborer started to load a car, the miner noticed some small pieces fall from the top. He told his laborer to stand back while he trimmed the top. He took a pick and began to trim down the loose coal, when a large mass fell on him.

September 20, Highland No. 2, Joseph Peshock, Polish, laborer, was instantly killed by a fall of slate, and his miner, Frederick Topko, was injured while they were taking out pillars in the Wharton vein. The miner was about to drill a hole in the high side rib, and the laborer was shoveling back coal, when a large mass of top slate fell.

November 12, Beaver Brook, Meinard Wargo, Hungarian, miner, was fatally injured by a fall of top slate in a breast in the Lykens vein. While he was scraping out a hole, the slate fell and struck him on the leg, crushing it. He was removed to the Hazleton Hospital, where he died a few days later.

Cars

January 18, Cranberry No. 4, Fred Fensick, Polish, driver, was taking a trip of empty cars up a run with a team of three mules and while on a curve the mules grazed a door that was hooked open. The door in some manner became unhooked. As long as the mules were against it, it remained open, but after the mules passed, it closed, catching him between end of door and the car and fatally injuring him.

January 21, Upper Lehigh, Herman Gross, German, driver, was instantly killed by having his head caught between car and prop on gangway. He was running a trip of cars down a run and was along side of the trip, spragging, when the rear car jumped off the track, swung to the side on which he was and pinioned him between the car and a prop.

January 29. Hazleton Shaft Colliery, Joseph Lawrence, Polish, driver, was fatally injured between cars. He and his helper ran a loaded car into the dump of counter chute, and while the car was on the dump one of the cars left on the turnout, followed them in, unnoticed on account of the noise made by the rushing coal, and Lawrence was caught between the cars.

April 13, Jeddo No. 4, Joseph Yenshaw, Slavonian, miner, was instantly killed by cars. He was walking along the gangway on his way home, when a small mine locomotive came along with a trip. He evidently attempted to jump on, but owing to the steam, could not see the rear end of the trip and stepped out too quickly and was caught by the cars.

September 5, Cranberry No. 5, Dennis Connor, American, driver, was instantly killed by falling under loaded cars. He was bringing a loaded trip out along the gangway and in some manner was caught, or slipped and fell under the cars. He was alone at the time, and no one knew of the accident until the fireman inquired if he had brought his trip out. Receiving a negative reply, they went in to see what was keeping him so long, and found his lifeless body under the car.

September 11, Drifton No. 1, Hugh Campbell, American, runner, was fatally injured by cars. He was running along side of the cars when he fell and the wheel or pedestal of the car ran over him, crushing his skull.

November 25, Harwood Colliery, Joseph Cornby, American, hitcher, was fatally injured. The rope on the slope broke and the runaway car tore up some planks at the bottom, one of which struck him on the leg. He was removed to the Hazleton Hospital, where he refused to allow the surgeons to amputate the limb. Blood poisoning set in and he died a few days after the accident. The rope had been examined the day previous, and reported safe.

December 27, Deringer Colliery, John Houser, American, driver, was instantly killed by being caught between a loaded car and the high side rib. He was pulling the car from one side of the slope to the other, and was riding on the wrong side of the car.

Premature Blasts

March 22, Cranberry No. 5, Thomas Michael, American, miner, was fatally injured by a blast. He was opening a chute and was a short distance up from the gangway. He had drilled a hole and had placed a charge of powder in it with a fuse. While he was pushing up the first cartridge, the charge exploded throwing him down on the gangway. This accident was, without a doubt, caused by the butt end of drill striking something that made a spark which communicated with the powder.

May 17, Cranberry No. 4, Edward Baker, American, miner, was instantly killed by an explosion of dynamite. He and his partner had drilled two holes in the top rock on new slope in the Gamma vein. The shot on the east side broke across the slope and took nearly all the load of the west side hole, tearing the fuse from the west side hole, but leaving some unexploded dynamite in the bottom. This occurred on the 14th of the month. On the 15th and 16th they were working in another part of the mine. On the 17th they came back to the slope to work and they noticed this unexploded dynamite in the bottom of the hole. Baker, in order to save the powder or to use the hole again, took a pick and began picking around it, although told by his partner not to do so, but to drill another hole along side of it. There was a sudden explosion and Baker's mangled body was thrown against the bottom rock.

July 2, Cranberry No. 4, Adam Tremas, Russian, miner, was instantly killed by a blast. He had drilled two holes and prepared them for blasting. He lighted both holes and then went to a place of safety. One shot went off and thinking that he had not ignited the fuse of the other hole, he went back and when within six or eight feet of the hole, the shot went off.

Falling Into Slopes

November 8, Highland No. 5, Dominic Camerano, Italian, miner, was fatally injured by falling down the manway of his breast. It seems that there was a small quantity of gas in his breast, and he had been told by the assistant mine foreman not to go to the face.

He, however, went up and ignited the gas, and in his excitement and hurry to get down, he slipped and fell down the manway, sustaining a fracture of the skull from which he died the next day.

Miscellaneous

February, 22, Ebervale Colliery, William Watson, Scotch, an old miner, who at the time of accident was laboring, was fatally injured. He was making a place for a prop to replace an old leg when the old leg broke, letting the collar and the weight which it sustained fall on him, causing a compound fracture of his leg and injury to his spinal cord.

Machinery, Outside

May 21, Beaver Brook Colliery, Walter Williams, American, jig-runner, was in some mysterious manner caught by his clothes on the jig shaft and was whirled around the shaft. It is supposed that the boy was taking a short cut to get to the floor above.

August 30, Lattimer Colliery, Ernest Pasquale, Italian, watchman, was fatally injured by being caught in cog wheel. His duty was to watch and stop coal and timber that might ride the chain and cause it to run off the sprocket wheel; also to examine chain for defective links. What took him up to where he was caught is unknown.

September 24, Drifton Colliery, John Titsco, Hungarian, screen tender, met his death by being caught in an elevator in the breaker.

Cars, Outside

March 6, Harwood Colliery, George Andruseck, Slavonian, top man, was caught between empty cars when a derailed loaded car bumped into the empty cars.

April 12, Beaver Brook Colliery, James Small, Hungarian, laborer, was almost instantly killed by being caught between a draw-bridge and a loaded refuse car.

June 22, Pond Creek Colliery, Joseph Smith, Polish, coal loader, was under the gondolas below the breaker blocking a leak in a car, when a train of empty cars bumped into the car that he was under, catching him, completely severing his arm and injuring him about the body. He died a few hours after the accident.

September 20, Cranberry Colliery, Antonio Buongari, American, slate picker, had occasion to leave the breaker and was given permission. He ran down the steps on the outside of the breaker, and just at that time a Lehigh Valley train crew was pushing up two condemned coal cars. Whether he attempted to jump on the cars or not is unknown, but he was found under the second car with both legs crushed. He died same evening.

October 26, Cranberry Colliery, Frank Vaupel, German, ashman, was instantly killed by cars. He went down to see a party of men who were putting a track into the boiler house and while crossing the track was run over by cars. The old man was deaf and did not notice the trip coming, and the engineer did not see him in time to give him warning.

Miscellaneous, Outside

November 8, Harwood Colliery, Joseph Mattis, Hungarian, teamster, on coal wagon, was pulling his team away when he was kicked and trampled by the mules. He was reported by the physician to be improving, but complications set in and he died several days after receiving the injury.

CONDITION OF COLLIERIES

G. B. MARKLE AND COMPANY

Jeddo No. 4 and Ebervale.—Ventilation good, roads and drainage good. Condition as to safety good.

Highland No. 5.—Ventilation good, roads and drainage good. Condition as to safety good,

Highland Nos. 1, 2 and 6.—Ventilation good, roads and drainage good. Condition as to safety good.

COXE BROTHERS AND COMPANY, INCORPORATED

Drifton Nos. 1 and 2.—Ventilation fair, roads and drainage fair. Condition as to safety good.

Eckley, Buck Mountain and Stockton.—Ventilation good, roads and drainage fair. Condition as to safety good.

Deringer, Gowen and Tomhicken.—Ventilation good, roads and drainage good. Condition as to safety good.

LEHIGH VALLEY COAL COMPANY

Hazleton Shaft.—Ventilation good, roads and drainage good. Condition as to safety good.

Hazleton No. 1.—Ventilation good, roads and drainage good. Condition as to safety good.

Spring Brook and Spring Mountain.—Ventilation good, roads and drainage good. Condition as to safety good.

A. PARDEE AND COMPANY

Cranberry.—Ventilation fair, roads and drainage bad. Condition as to safety good.

PARDEE BROTHERS AND COMPANY

Lattimer.—Ventilation good, roads and drainage good. Condition as to safety good.

HARWOOD COAL COMPANY

Harwood.—Ventilation good, roads and drainage fair. Condition as to safety good.

UPPER LEHIGH COAL COMPANY

Upper Lehigh.—Ventilation good, roads and drainage good. Condition as to safety good .

C. M. DODSON AND COMPANY

Beaver Brook.—Ventilation fair, roads and drainage bad. Condition as to safety good.

JOHN S. WENTZ AND COMPANY

Hazle Brook.—Ventilation fair, roads and drainage fair. Condition as to safety good.

HAZLE MOUNTAIN COAL COMPANY

Hazle Mountain.—Ventilation good, roads and drainage fair. Condition as to safety good.

M. S. KEMMERER AND COMPANY

Sandy Run.—Ventilation good, roads and drainage fair. Condition as to safety good.

POND CREEK COAL COMPANY

Pond Creek.—Ventilation fair. Condition as to safety good.

STAUFFER AND ROWE

Rowe.—Ventilation fair, roads and drainage fair. Condition as to safety good.

THOMAS R. REESE AND SON

Dusky Diamond.—Ventilation fair, roads and drainage fair. Condition as to safety good.

BLACK CREEK COAL COMPANY

Harleigh.—Idle.

IMPROVEMENTS

G. B. MARKLE AND COMPANY

Jeddo No. 4.—Two tunnels driven from the Mammoth to the Wharton vein; one tunnel 125 feet long, the other 129 feet long. One tunnel driven 100 feet from the Wharton to the Wharton vein.

Highland No. 5.—Plane K driven in Slope B from elevation 858 to elevation 970, a distance of 240 feet.

Manway driven from bottom of Slope B to West gangway A, Slope A. Tunnel O is being driven from south end of Tunnel H through the top rock across the syncline to north side of Tunnel F. basin.

Compressed air haulage system extended from Pink Ash to Slope A west end, a distance of about 1200 feet.

Highland No. 2.—A 2,000 H. P. Warren Webster water heater installed in boiler house.

Steam drag saw installed outside to cut timber.

Highland No. 1.—A 6½ ton electric locomotive installed in Slope C for mine haulage.

Installed in Slope C Worthington centrifugal electrically operated 4 inch two stage pump.

Jeanesville compound duplex condensing pump, 19x33x12x36 inches, installed at main bottom. New pump house constructed for pump.

6 inch Markle pump placed in Slope B.

Highland No. 6.—16 Foot Guibal fan installed, and air shaft driven 20x6x6 feet to lower vein for intake.

New inside pump-house built wtih concrete sides and concrete arched roof.

17x28x12x36 inch Compound duplex condensing pump. installed, together with column and steam lines.

Babcock and Wilcox 300 H. P. boiler installed.

Ebervale.—300 H. P. Babcock and Wilcox boiler installed.

Tunnel D driven from West gangway A, Plane E, through the top rock to Primrose vein through fault, a distance of 575 feet.

A rock air way driven from Big vein to Primrose, a distance of 125 feet.

No. 1 slope double-tracked and new top built.

Harleigh.—Work has been commenced in connection with the re-opening of this property. A slope and airway are being sunk in the Holmes vein, and stripping operations are under way at the west end.

COXE BROTHERS AND COMPANY, INCORPORATED

Drifton Colliery.—The stripping work at the west end of the Drifton property adjoining Lattimer, has been continued, with four shovels, and 257,476 yards mostly second class, removed, which makes a total of 2,376,545 yards handled to December 31, 1907.

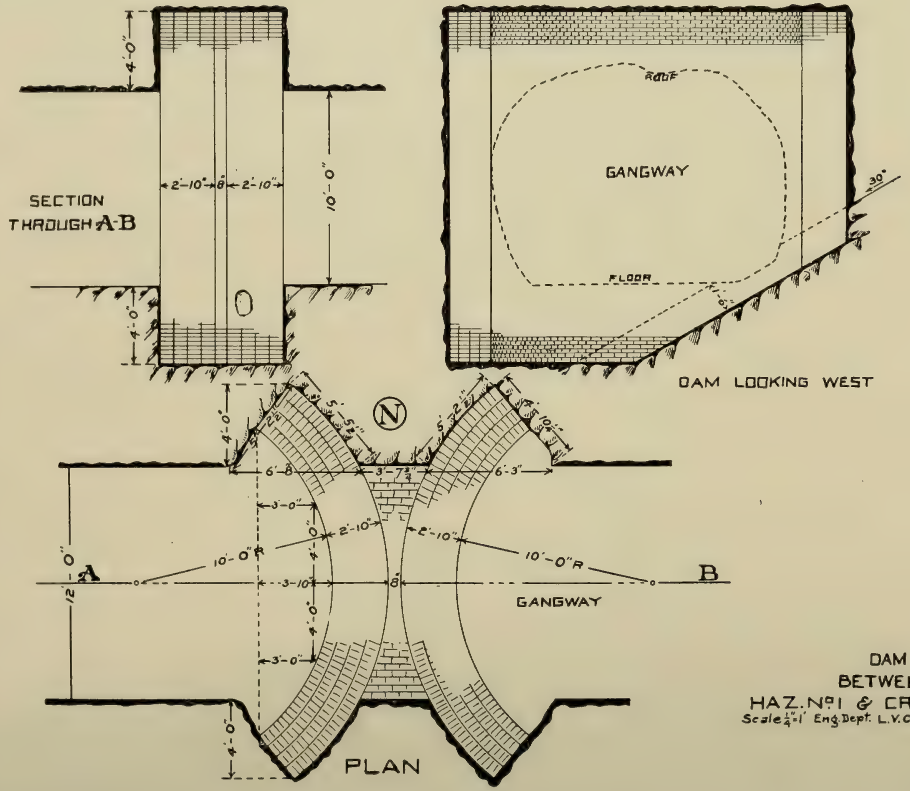
No. 2 Slope.—The tunnel parallel to the west line and about 200 feet from this line has been continued and is now 600 feet long. It has passed the first basin, with the Mammoth 10 feet above the roof of tunnel, and is entering into the second basin and possibly will strike the Mammoth there. A saddle setting in and developed by the stripping about 400 feet east forms this second basin. The tunnel will be continued across this second basin to the Gamma vein.

Eckley Colliery.—The tunnels reported in 1906 as having been started in Slope No. 2 section have been completed.

Slope No. 6, which was abandoned in 1902, has been re-started, and gangways are being driven east and west in the overlying veins, Gamma and Wharton, which prove workable.

Stripping operations were continued at Buck Mountain with five shovels; one at No. 11 Slope removed 47,695 yards, or a total of 167,135 yards to December 31, 1907; at Slope No. 12 two shovels were operated and removed 111,040 yards, second class, or a total of 362,643 yards to the end of the year; two shovels in the original Buck Mountain stripping pit (the Southern or Slope No. 1 Basin) removed 160,192 yards of second class during the year, or in all 1,093,771 yards on this work.

Inside work eastward consisted in driving a short tunnel, about 30 feet long, to a vein overlying the Buck Mountain, which forms an exact basin corresponding with the Buck Mountain worked pre-



DAM
BETWEEN
HAZ. No. 1 & CRANBERRY
Scale ¼"=1' Eng. Dept. L.V.C.Co. Lehigh Div.
April 23, 1907.

viously. This overlying vein is an exact repetition of the original Buck Mountain vein, separated in three benches, a false bottom —6′ and 9′—representing again a 24 foot vein, or in fact two undisturbed Buck Mountain veins, separated by about 20 feet of rock, each containing the same amount of coal, separated by similar dividings, symmetrically deposited above each other.

The West gangway No. 2 has been extended and is turning the basin. An opening has been started on line of Slope No. 11 to connect with the slope that was mentioned in last year's report.

Stockton.—Gangways driven in the Primrose and the Tunnel at the east extended across the basin to the Gamma vein, which was struck in fair condition at the writing of this report.

Deringer.—A rock proving hole, about 180 feet long, was driven in a leader in place of the Buck Mountain, and by a cross-cut the No. 13 West gangway, driven twenty years ago, was tapped and ventilated, which now makes it possible to work thirty-four breasts.

Gowen No. 4.—A tunnel was driven 140 feet long through a local disturbance at the west end of the Buck Mountain workings and the vein found in good condition.

The No. 6 Slope, preparations for which were made during 1906, has been sunk 480 feet to the basin; turnouts made on top and for the upper lift in the bottom. The vein is in fine condition, the basin dipping eastward on 8 degrees.

Tomhicken.—Slope No. 8, opening the middle basin, has been sunk to a depth of 485 feet on a regular grade of 23 degrees. It has penetrated the Mammoth middle or lower benches, the Wharton, and was stopped in the Buck Mountain vein, which proved 2 feet 6 inches to 3 feet 6 inches thick. Bottom of slope is being formed, a sump made, and gangways driven in this vein.

LEHIGH VALLEY COAL COMPANY

At Hazleton No. 1.—Two brick dams have been started on the 4th Level, West Mammoth. This gangway having broken into the Cranberry workings, to maintain in effect a boundary pillar, a twin dam is being built, a plan of which is attached.

A new Slope, No. 8, has been driven out just east of No. 1, completed and connected direct to the breaker. The former No. 1 hoisting engine will take the coal from this new slope, and a new engine has been installed in a substantial brick building to hoist from Slope No. 1. This arrangement will bring the coal to the breaker direct, saving the intermediate handling between old slope No. 8 and the breaker plane. Self-acting turnouts have been put in at the bottom, and the cars can be moved economically.

Strippings No. 6, which were started in November, 1901, are tributary to this breaker. 46,529 yards removed during 1907, making a total of 324,120 yards. Silting in the Wharton West of Slope No. 1 has been started and is progressing satisfactorily.

This No. 1 slope and its tributaries have been idle since November 1, pending the remodeling of the breaker, which is expected to resume April 1.

Hazleton No. 5.—Tributary to the Shaft colliery, will give a better supply of coal to the breaker. The No. 4 Slope track has been relaid from 3rd Lift to elevation 1118. Turnouts will be constructed and tunnels driven to connect other workings and handle the coal more economically.

Hazleton No. 3.—The Rock slope branching off to the east from Slope No. 40 has been completed to the Gamma vein. Gangways were started off and the East gangway extended opposite to the underground Buck Mountain Slope in Shaft section. A pipeway has been driven near the second lift East Gamma, Hazleton Shaft. The purpose of this work is the installation of a large pumping plant to handle and hold the Stockton water which is seriously interfering with the Hazleton workings and the Stockton operations of Coxe Brothers and Company, Incorporated.

A timber dam was built in 2nd Level Shaft, South Tunnel East Primrose between Breasts 55 and 56, to prevent the Diamond water from flowing into the Hazleton Shaft workings when it reached an elevation of 1285. Another temporary dam in Shaft 1st Level South tunnel was erected in East Orchard between Breasts 4 and 5 during the recent floods to check the water and regulate it to suit the pumping capacity.

In Shaft Section the underground Buck Mountain Slope from 2nd to 3rd Lift East Turnout has been completed. A hoisting engine was erected at the No. 40 engine house and the rope carried over the surface to a bore hole conveying it into the mines.

A dip gangway is being driven in the Primrose at 5 degrees to reach and open the basin, and a hoisting engine has been installed replacing mule power.

The No. 5 Strippings, started May 1899, have been continued, 73,384 yards having been removed during 1907, making a total of 379,954 yards.

The largest amount of coal in the former Stockton and Diamond workings is tied up by being submerged, and it becomes of vital importance to ascertain if the fire is still existing on the South side in the Mammoth and Primrose workings, which originated on the East Sugarloaf workings towards the end of the Linderman-Skeer lease.

A pump was put up at the canal and the water thrown on the banks, also part of the creek was turned against the foot of these banks, and from the snow remaining, it can be reasonably judged that no more fire exists in the banks; but there must certainly be a high temperature still in the surrounding strata, for when the water rose to highest level during recent floods great volumes of steam issued from the caves. It is now the intention to put drill holes from the Wharton into the Mammoth in the fired district and test by them the temperature of ground and water and so trace the fire.

Spring Mountain Colliery.—Principally preliminary work is being done towards erecting the breaker and preparing the mines for shipment. The railroad tracks have been graded, the breaker foundations completed; office, oil house, warehouse and shop have been erected. The central boiler plant has been started, an eight inch pipe line constructed to Spring Brook and a six-inch line to Spring Mountain No. 4, by which the detached boiler houses at these two places have been dispensed with. The Spring Mountain No. 1 boiler house will also be abandoned. Two tanks of about 50,000 gallons capacity were set up and about 4,500 feet of 4 inch pipe laid temporarily to supply the colliery with fresh water during the dry season.

630 feet of tunnel were driven in extension of the Long tunnel in No. 4 Basin. This tunnel tapped the Buck Mountain and Lykens veins, and gangways have been driven east and west. A proving tunnel was driven 70 feet long on line of the breaker slope to the Lykens and a proving hole in the Buck Mountain which will be widened and graded for the Main Hoisting slope. In the Spring Mountain section of the Spring Brook colliery a slope and airway have been driven by which the coal from this section will be taken to the breaker. A rock slope has been sunk to the Lykens, which was started in 1906, and during the year 181 feet were driven. Over 6,000 feet of track were relaid in the old workings preparatory to mining the remaining coal.

Spring Brook Colliery has been preparing the coal from Spring Mountain, besides the coal from the Spring Brook property. The Spring Mountain coal hoisted on Slope No. 4 is taken by transfer trucks over the Lehigh Valley Railroad tracks to the Spring Brook breaker.

PARDEE BROTHERS AND COMPANY

Lattimer.—About 50 yards south of No. 3 breaker a slope has been sunk 310 feet on an average dip of 25 degrees, in the lower split of the Buck Mountain vein, north dip; gangways have been started east and west, and a tunnel driven north 50 feet through the intervening strata to the upper split of the Buck Mountain vein.

A slope has been sunk on the south dip of the Buck Mountain vein from tunnel No. 22 off No. 1, 2nd counter, stripping 160 feet on an average pitch of 60 degrees.

A proving slope has been sunk in one of the underlying veins just west of No. 2 houses a distance of 310 feet, on an average pitch of 16 degrees.

Slope No. 12 has been extended to the basin and gangways started east and west.

A slope has been sunk to the basin in the Gamma vein, South tunnel, No. 16 back basin.

Tunnel No. 20 off the West Gamma gangway Slope No. 2 has been extended north to the underlying veins.

A rock hole has been driven from the East Gamma gangway, Slope No. 2, through the intervening strata to the Wharton vein, and gangways are being driven east and west, from which chutes will be worked up under the Mammoth vein pillars to facilitate the robbing of the pillars.

A tunnel has been driven south from the Gamma vein just west of Slope No. 9 to the underlying veins.

A tunnel has been started west from the sharp turn in the west Gamma gangway, to cut the Mammoth vein.

The tunnel to the Buck Mountain vein at the back basin is being extended north to the underlying seams.

The tunnel driven south to the Buck Mountain vein from the West Gamma gangway, Orphans Home, has been extended south to the underlying veins.

A tunnel has been driven north from the Primrose to the Mammoth vein 150 feet west of Slope No. 11.

A tunnel is being driven north from the basin of the Gamma vein just west of the foot of Slope No. 12 to the underlying seams.

A mule-way is being driven in Gamma vein from the foot of Slope No. 12 up to the West gangway, Slope No. 2.

Preparations are well under way for the installation of two 10-ton electric motors in Slope No. 9, which will reduce to a minimum the number of mules now used to transport the coal from the workings on the eastern end of the property and down through Milnesville on the west. The power to operate the motors, electric hoists and other up-to-date electric mining apparatus, which are to be installed during 1908, will be furnished by the Harwood Electric Power Company.

A concrete block sub-station, 27x31 feet, is also under course of construction about 50 yards south of Lattimer No. 4 breaker.

A new fan has been erected on Slope B to take the place of one destroyed by fire.

A new ticket office has been built at No. 4 breaker.

A tunnel has been driven south from the Mammoth stripping to the Gamma vein No. 2 basin, about 500 feet west of Lattimer line.

A tunnel has been driven north from the Mammoth stripping to the Gamma vein, about 200 feet west of Slope No. 7.

HARWOOD COAL COMPANY

Harwood.—A centrifugal pump, with a capacity of 500 gallons a minute, has been installed at the Harwood Water Works, which supplies all the water consumed at the colliery. It is operated with power furnished by the Harwood Electric Power Company. The installation of this pump has done away with an air compressor, air pumping apparatus and a steam pumping plant formerly in use at this plant.

A proving slope has been sunk 135 feet on an average pitch of 21 degrees southwest of the breaker and just north of the north crop of the Buck Mountain vein No. 21 basin.

UPPER LEHIGH COAL COMPANY

Upper Lehigh.—At the eastern end of property a dam or catch basin rebuilt for coal dirt near No. 8 old slope, also a new one near No. 3 Slope. Ditch built for drainage at the western end of property 1,200 feet long, and north side of No. 4 basin. An extra 50 H. P. boiler placed at I slope. Erected a new steam line of four and five inch gas pipe to No. 6 and No. 7 slopes. Also the Water Works for a distance of 6,000 feet from new boiler plant installed during the year. A new chute line for conveying coal from breaker to new boiler room installed. Installed one of Ayer's pickers in re-cracker or small breaker; also 250 feet of conveyor line from west to east side of breaker to carry refuse. Four steam shovels were working during the year and removed 136,699 yards of earth and 59,134 yards of rock.

One electric direct current generator installed, capacity of 25 Kilo Watts, 125 volts, 200 amperes and 1100 revolutions.

450 feet of 12 inch column pipe at No. 2 Slope on main pumping station, from bottom of slope to surface.

C. M. DODSON AND COMPANY

Beaver Brook.—Two 140 H. P. return tubular boilers installed.

HAZLE MOUNTAIN COAL COMPANY

Hazle Mountain.—4 Miles of road 3 foot gauge. Installed one 330 horse power Babcock and Wilcox boilers. One 16 foot ventilating fan (Mine). One double hoisting engine, 13x24. One Goyne pump, 16x10x36. One mine locomotive, 10x16. Tunnel completed, 682 feet. New boiler house. New engine house. New stable.

BLACK CREEK COAL COMPANY

Harleigh.—Slope extended in the Buck Mountain vein about 150 feet.

Mine Foremen's Examinations

The annual examination of applicants for certificates of qualification as Mine Foremen and Assistant Mine Foremen was held at the Y. M. C. A. Building, Hazleton, May 14 and 15. The Board of Examiners was composed of the following members: David J. Roderick, Inspector, Hazleton; E. L. Bullock, Superintendent, Audenried; Fred Henry, miner, W. Hazleton; Fred Young, miner, Hazleton.

The following applicants were granted certificates:

Mine Foreman

Robert H. Jones, Lansford.

Assistant Mine Foremen

Edward J. Bainbridge, Hazleton; George W. Thomas, Summit Hill; James Foster Gundry, Stockton; Thomas Edmonds, Beaver Meadow; Joshua William Griffith, Hazleton; John Paisley, Nesquehoning; Edward Adams, Summit Hill; David Thomas, Jeddo.

Twelfth District

SCHUYLKILL COUNTY

Mahanoy City, Pa., March 31, 1908.

Hon. James E. Roderick, Chief of Department of Mines:

Sir: I have the honor of transmitting herewith my annual report as Inspector of Mines for the Twelfth Anthracite District, for the year ending December 31, 1907.

The tables contain the statistics relative to production, number of days worked, employes, accidents, etc. The condition of the collieries is also reported.

Respectfully submitted,

P. C. FENTON,

Inspector.

SUMMARY OF STATISTICS

Number of collieries,	10
Number of mines,	14
Number of mines in operation,	14
Number of tons of coal shipped to market,	3,165,964
Number of tons used at mines for steam and heat,	337,059
Number of tons sold to local trade and used by employes,	45,967
Number of tons produced,	3,548,990
Number of tons produced by compressed air machines,	——
Number of tons produced by electrical machines,	——
Number of persons employed inside of mines,	4,984
Number of persons employed outside,	2,494
Number of fatal accidents inside of mines,	30
Number of fatal accidents outside,	3
Number of non-fatal accidents, inside of mines,	33
Number of non-fatal accidents outside,	3
Number of tons of coal produced per fatal accident inside,	118,300
Number of persons employed per fatal accident inside,	166
Number of persons employed per fatal accident outside,	831
Number of persons employed per non-fatal accident inside,	151
Number of persons employed per non-fatal accident outside,	831
Number of wives made widows,	20
Number of children orphaned,	47
Number of steam locomotives used outside,	13
Number of compressed air locomotives used inside,	12
Number of electric motors used inside,	4
Number of fans in use,	14
Number of gaseous mines in operation,	13
Number of non-gaseous mines in operation,	1

TABLE A

PRODUCTION OF COAL

Names of Operators	Tons
Philadelphia and Reading Coal and Iron Company, ...	2,879,374
Lentz and Company, ...	371,852
Lehigh Valley Coal Company, ...	293,622
Price Coal Company, ...	4,142
Total, ...	3,548,990

Production by Counties

Schuylkill, ...	3,548,990

TABLE B—Fatal and non-fatal accidents inside and outside of mines; number of tons of coal produced per accident; number of persons employed; number employed per accident

Names of Operators	Fatal Accidents			Non-fatal Accidents			Tons of coal produced per fatal accident inside	Tons of coal produced per non-fatal accident inside	Number of employes inside	Number of employes outside	Total number of employes	Number of employes inside per fatal accident	Number of employes outside per fatal accident	Number of employes inside per non-fatal accident	Number of employes outside per non-fatal accident
	Inside	Outside	Total	Inside	Outside	Total									
Philadelphia and Reading Coal and Iron Co.,	27	3	30	24	3	27	106,643	119,974	4,040	2,108	6,148	149	702	168	702
Lentz and Co.,	1	....	1	3	....	3	371,852	123,951	579	243	822	579	....	193	....
Lehigh Valley Coal Co.,	2	....	2	6	....	6	146,811	48,937	358	134	492	179	....	59	....
Miscellaneous companies,	....	....	....	....	....	....	....	....	7	9	16	....	....	....	....
Totals and averages for district,	30	3	33	33	3	36	118,300	107,545	4,984	2,494	7,478	166	831	151	831

TABLE C.—Classification of Fatal Accidents Inside and Outside of Mines

	Months													
	January	February	March	April	May	June	July	August	September	October	November	December	Totals	Percentages
Causes of Accidents Inside														
Falls of coal,	1	....	2	....	....	2	1	....	1	....	1	1	9	30.00
Falls of slate,	....	....	1	2	....	....	....	1	....	....	1	....	5	16.66
Falls of roof,	....	....	1	....	....	....	....	....	....	1	....	....	2	6.67
Mine cars,	...	1	....	1	....	....	1	....	....	....	1	...	4	13.33
Explosions of gas and dust,	...	....	1	....	....	....	1	....	....	....	....	....	2	6.67
Premature blasts,	2	2	....	....	....	1	....	....	....	....	....	....	5	16.66
Falling into slopes, etc.,	....	....	....	....	1	....	1	....	....	....	....	....	2	6.67
Miscellaneous,	....	....	....	....	....	....	1	....	....	....	....	....	1	3.34
Totals,	3	3	5	3	1	3	5	1	1	1	3	1	30	100.00
Causes of Accidents Outside														
Cars,	....	....	....	....	1	....	....	....	....	....	....	....	1	33.33
Machinery,	...	....	....	....	....	....	1	....	1	....	....	....	2	66.67
Totals,	...	....	....	....	1	....	1	....	1	....	....	....	3	100.00
Grand totals inside and outside,	3	3	5	3	2	3	6	1	2	1	3	1	33	

TABLE D.—Classification of Non-fatal Accidents Inside and Outside of Mines

	Months													
	January	February	March	April	May	June	July	August	September	October	November	December	Totals	Percentages
Causes of Accidents Inside														
Falls of coal,	1	2	....	....	....	1	2	....	....	2	....	1	9	27.28
Falls of slate,	...	1	....	....	....	....	....	....	....	....	....	....	1	3.03
Falls of roof,	....	....	....	....	....	....	1	....	....	1	....	....	2	6.06
Mine cars,	...	1	....	2	1	....	1	....	....	1	....	....	6	18.18
Explosions of gas and dust,	....	....	3	....	....	1	....	....	2	....	....	....	6	18.18
Premature blasts,	...	....	1	....	....	1	1	....	....	....	....	....	3	9.09
Mules,	1	....	....	....	....	....	....	....	....	....	....	...	1	3.03
Miscellaneous,	...	....	....	1	2	....	1	....	....	....	1	....	5	15.15
Totals,	2	4	4	3	3	3	6	....	2	4	1	1	33	100.00
Causes of Accidents Outside														
Machinery,	1	1	....	....	....	....	....	....	....	....	....	....	2	66.67
Miscellaneous,	...	....	....	1	....	....	....	....	....	....	....	....	1	33.33
Totals,	1	1	....	1	....	....	....	....	....	....	....	....	3	100.00
Grand totals inside and outside,	3	5	4	4	3	3	6	....	2	4	1	1	36	

TABLE E.—Occupations of Persons Killed or Fatally Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Inside													
Fire bosses and assistants,	....	....	....	....	....	....	1	....	....	....	....	....	1
Miners,	3	2	5	....	1	3	3	1	1	....	2	1	22
Miners' laborers,	....	1	....	2	....	....	....	....	....	....	....	....	3
Doorboys and helpers,	....	....	....	....	....	....	....	....	....	....	1	....	1
All other employes,	....	....	....	1	....	....	1	....	....	1	....	....	3
Totals,	3	3	5	3	1	3	5	1	1	1	3	1	30
Outside													
Slatepickers (boys),	....	....	....	....	....	....	....	....	1	....	....	....	1
All other employes,	....	....	....	....	1	....	1	....	....	....	....	....	2
Totals,	....	....	....	....	1	....	1	....	1	....	....	....	3
Grand totals inside and outside,	3	3	5	3	2	3	6	1	2	1	3	1	33

TABLE F.—Occupations of Persons Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Inside													
Miners,	1	3	3	1	2	1	5	....	2	1	1	1	21
Miners' laborers,	....	....	1	2	....	2	1	....	....	2	....	....	8
Drivers and runners,	1	....	....	....	1	....	....	....	....	....	....	....	2
All other employes,	....	1	....	....	....	....	....	....	....	1	....	....	2
Totals,	2	4	4	3	3	3	6	....	2	4	1	1	33
Outside													
Slatepickers (boys),	....	....	....	1	....	....	....	....	....	....	....	....	1
All other employes,	1	1	....	....	....	....	....	....	....	....	....	....	2
Totals,	1	1	....	1	....	....	....	....	....	....	....	....	3
Grand totals inside and outside,	3	5	4	4	3	3	6	....	2	4	1	1	36

TABLE G.—Nationality of Persons Killed or Fatally Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
American,	....	....	1	....	....	....	1	....	1	....	....	....	3
English,	....	....	....	....	....	....	1	....	....	....	....	....	1
Welsh,	....	....	1	....	....	....	....	....	....	....	....	....	1
Irish,	....	....	....	1	....	....	....	....	....	....	1	....	2
German,	....	1	....	....	....	....	....	....	....	....	1	....	2
Polish,	....	....	2	1	1	2	2	1	....	....	1	....	10
Italian,	....	....	....	....	....	....	....	....	....	1	....	....	1
Lithuanian,	3	2	1	1	1	1	2	....	1	....	....	1	13
Totals,	3	3	5	3	2	3	6	1	2	1	3	1	33

TABLE H.—Nationality of Persons Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
American,	1	1	....	1	1	....	....	....	....	....	....	....	4
German,	1	....	....	....	....	....	....	....	....	....	....	....	1
Polish,	1	1	2	2	1	1	4	....	1	2	1	1	17
Italian,	....	1	....	....	....	....	....	....	....	....	....	....	1
Slavonian,	....	1	....	1	1	....	....	....	....	....	....	....	3
Lithuanian,	....	1	2	....	....	2	2	....	1	2	....	....	10
Totals,	3	5	4	4	3	3	6	....	2	4	1	1	36

TABLE I.—Operators and mines, kind of openings, type and size of fans, size of furnaces, volume of air produced by fan or furnace per minute, number of splits of air currents, and number of persons employed inside

Names of Operators and Mines	Kind of opening	Gaseous or non-gaseous	Method of ventilation	Diameter of fan in feet	Width of blades in feet	Depth of blades in feet	Number of revolutions per minute	Water gauge developed—in inches	Name of fan	Power used	Area of furnace bars in square feet	Number of splits of air currents	Number of cubic feet of air per minute entering the mine at inlet	Total quantity of air per minute circulating in all the splits in cubic feet	Number of persons employed inside
Philadelphia and Reading Coal and Iron Co.															
Ellangowan,	Shaft,..	Gaseous,	Fan,.....	20	6.6	6	80	2	Guibal ..	Steam,...	....	9	49,176	30,025	181
St. Nicholas,	Slope,..			21	7	6.6	92	2.4			....	9	45,130	37,555	195
Suffolk Colliery:															
Suffolk,	Slope,..			18	6.6	5.6	60	1.4			....	7	49,350	20,650	110
Suffolk,	Slope,..			18	6.6	5.6	60	1.4			....	7	32,450	17,750	89
Maple Hill Colliery:															
Maple Hill,	Shaft,..			21	7	6.6	75	1.7			....	9	80,271	30,488	371
Maple Hill,	Shaft,..			21	7	6.6	75	1.7			....	8	86,160	42,841	355
Tunnel Ridge,	Slope,..			21	7	6.3	100	2			....	7	126,486	32,477	347
Mahanoy City,	Slope,..			21	7	6.6	86	1.9			....	10	107,330	55,790	160
North Mahanoy,	Slope,..			21	7.6	6.3	80	2.1			....	8	126,320	62,290	246
Lentz and Co.															
Park No. 2 Colliery:															
Park No. 2,	Slope,....	Gaseous,	Fan,.....	16	4	4.5	90	1.5	Guibal, ..	Steam,...	....	7	86,000	60,000	160
Park No. 3,				14	4	4	90	1.3			....	2	100,000	75,000	229
Park No. 4,				16	4.5	4.5	85	1.4			....	8	75,000	60,000	190
Lehigh Valley Coal Co.															
Primrose,	Slope,....	Gaseous,	Fans,....	10	4.4	4.3	90	1	Guibal, ..	Steam,...	....	5	38,000	30,000	105
				16	4	4.6	105	1.2			....	6	47,000	37,000	235
Price Coal Co.															
High Point,	Slope,....	Non-gas.	Natural,	......	......	......	......	......	....	....	....	1	6,000	....	7

TABLE 1.—Operators, location of collieries, railroads, etc.

Names of Operators and Collieries	County	Name of General Superintendent	Post Office	Name of Superintendent	Post Office	Railroad to Mine
Philadelphia and Reading Coal and Iron Co.						
Ellangowan, ...	Schuylkill,.......	W. J. Richards,..	Pottsville, ...	Reese Tasker, ...	Pottsville, ...	P. and R.
St. Nicholas, ...						
Suffolk, ...						
Maple Hill, ...						
Tunnel Ridge, ...						
Mahanoy City, ...						
North Mahanoy, ...						
Lentz and Co.						
Park No. 2, ...	Schuylkill,.......	James L. Reese,..	Park Place, ...	James L. Reese,..	Park Place, ...	Lehigh Valley
Lehigh Valley Coal Co.						
Primrose, ...	Schuylkill,.......	S. D. Warriner,...	Wilkes-Barre, ...	J. M. Humphrey,..	Centralia, ...	Lehigh Valley
Price Coal Co.						
High Point, ...	Schuylkill,.......	....	....	M. W. Price, ...	Shenandoah, ...	Lehigh Valley

TABLE 2.—Number of tons of coal mined, number of days worked, number of persons employed, number killed and injured, quantity of powder and dynamite used, etc.

Names of Operators and Collieries	County	Number of tons of coal shipped to market	Number of tons used at collieries for steam and heat	Number of tons sold to local trade and used by employes	Total production of coal in tons	Number of days worked	Number of employes	Number of fatal accidents	Number of non-fatal accidents	Number of kegs of powder used	Number of pounds of dynamite used	Number of horses and mules
Philadelphia and Reading Coal and Iron Co.												
Ellangowan,	Schuylkill,	389,280	37,628	560	427,468	251	1,035	1	6	12,535	48,365	86
St. Nicholas,		326,613	36,866	347	363,826	282	729	2	1	8,884	76,402	70
Suffolk,		333,265	21,973	1,429	356,667	280	875	4	5	8,653	32,818	84
Maple Hill,		715,290	37,618	....	752,908	280	1,438	13	5	19,884	56,028	78
Tunnel Ridge,		204,349	66,170	....	270,519	277	620	4	3	2,633	54,571	69
Mahanoy City,		226,396	33,474	35,083	294,953	279	596	2	1	6,582	23,108	76
North Mahanoy,		373,162	36,365	3,506	413,033	278	855	4	6	6,255	31,463	88
Totals,	....	2,568,355	270,094	40,925	2,879,374	....	6,148	30	27	65,426	322,755	551
Lentz and Co.												
Park No. 2,	Schuylkill,	331,422	38,463	1,967	371,852	267	822	1	3	8,446	57,050	98
Lehigh Valley Coal Co.												
Primrose,	Schuylkill,	262,845	28,102	2,675	293,622	245	492	2	6	7,071	17,314	45
Price Coal Co.												
High Point,	Schuylkill,	3,342	400	400	4,142	191	16	......	......	75	1,150	2
Grand totals,	....	3,165,964	337,059	45,967	3,548,990	....	7,478	33	36	81,018	398,269	696

TABLE 2.—Part 2

Names of Operators	County	Number of Boilers					Locomotives			Number of steam engines of all classes	Total horse power	Number of pumps delivering water to surface	Capacity in gallons per minute	Quantity delivered to surface per minute—gallons	Number of electric dynamos	Number of air compressors
		Cylindrical	Horse power	Tubular	Horse power	Total horse power	Steam	Air	Electric							
Philadelphia and Reading Coal and Iron Co.,	Schuylkill,	12	360	118	16,320	16,680	10	12	......	120	23,553	22	40,894	8,300	1	9
Lentz and Co.,		....	....	13	3,250	3,250	1	......	......	1	3,280	3	4,800	....	......	......
Lehigh Valley Coal Co.,		....	....	11	1,750	1,750	2	......	4	38	2,426	1	3,600	2,880	1	1
Price Coal Co.,		....	....	1	100	100	......	......	......	2	60	......	....	....	......	......
Totals,		12	360	143	21,420	21,780	13	12	4	161	29,319	26	49,294	11,180	2	10

TABLE 3.—Number of each class of employes inside and outside of mines

Names of Operators and Collieries	County	Inside											Outside									Grand total inside and outside
		Mine foremen	Assistant mine foremen	Fire bosses and assistants	Miners	Miners' laborers	Drivers and runners	Doorboys and helpers	Pumpmen	Company men	All other employes	Total inside	Superintendents	Foremen	Blacksmiths and carpenters	Engineers and firemen	Slatepickers (boys)	Slatepickers (men)	Bookkeepers and clerks	All other employes	Total outside	
Philadelphia and Reading Coal and Iron Co.																						
Ellangowan,	Schuylkill,	1	2	8	200	139	40	10	1	117	97	615	....	3	10	39	97	10	4	257	420	1,035
St. Nicholas,		1	....	7	199	73	24	5	4	114	72	499	....	1	9	24	58	22	4	112	230	729
Suffolk,		1	1	8	218	105	27	6	......	59	128	553	....	3	8	26	66	20	3	196	322	875
Maple Hill,		1	2	15	419	148	84	21	......	116	220	1,026	....	1	11	34	132	32	4	197	412	1,438
Tunnel Ridge,		1	1	7	121	58	46	5	3	59	100	401	....	2	8	33	49	13	3	111	219	620
Mahanoy City,		1	1	3	153	71	40	9	2	54	76	410	....	2	7	23	33	37	4	80	186	596
North Mahanoy,		2	....	6	174	109	33	11	4	80	117	536	....	4	9	28	80	40	5	153	319	855
Totals,		8	7	54	1,484	703	294	67	14	599	810	4,040	....	17	62	207	515	174	27	1,106	2,108	6,148
Lentz and Co.																						
Park No. 2,	Schuylkill,	2	2	9	210	188	35	2	8	76	47	579	2	1	18	58	18	68	5	73	243	822
Lehigh Valley Coal Co.																						
Primrose,	Schuylkill,	1	4	1	154	86	22	1	3	......	86	358	....	2	9	18	22	......	2	81	134	492
Price Coal Co.																						
High Point,	Schuylkill,	1	....	....	2	4	......	......	......	......	......	7	1	1	1	1	4	......	......	1	9	16
Grand totals,		12	13	64	1,850	981	351	70	25	675	943	4,984	3	21	90	284	559	242	34	1,261	2,494	7,478

TABLE 3.—Part 2

Names of Operators and Collieries	County	Number of Days Worked in Breaker												
		January	February	March	April	May	June	July	August	September	October	November	December	Total
Philadelphia and Reading Coal and Iron Co.														
Ellangowan,	Schuylkill,	23	20	17	23	21	22	22	20	21	23	20	19	251
St. Nicholas,		26	23	19	25	24	23	24	22	24	26	23	23	282
Suffolk,		26	23	19	25	24	23	24	22	24	26	24	20	280
Maple Hill,		25	22	19	25	24	24	24	23	24	25	23	22	280
Tunnel Ridge,		26	23	17	25	24	23	24	23	23	26	23	20	277
Mahanoy City,		25	23	19	24	24	23	24	23	24	26	22	22	279
North Mahanoy,		26	20	18	24	25	23	23	23	23	26	23	24	278
Lentz and Co.														
Park No. 2,	Schuylkill,	24	18	21	25	22	24	24	25	22	25	21	16	267
Lehigh Valley Coal Co.														
Primrose,	Schuylkill,	20	18	20	21	20	22	19	22	19	24	22	18	245
Price Coal Co.														
High Point,	Schuylkill,	6	17	20	16	10	20	18	14	14	22	17	17	191

TABLE 4.—Fatal accidents inside and outside of mines

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Number of widows	Number of orphans	Name of Mine	County	Nature and Cause of Accident in Brief
Jan.	8	Michael Kupnovich,	Lithuanian,	Miner,	24	S.	....	....	Maple Hill,	Schuylkill,	Instantly killed by fall of coal while dressing down material at face of breast.
	28	Charles Boberskie,	Lithuanian,	Miner,	42	M.	1	6	Maple Hill,		Instantly killed by premature blast while tamping a hole charged with dynamite.
	28	John Dermakus,	Lithuanian,	Miner,	24	M.	1	....	Maple Hill,		Fatally injured by premature blast while tamping a hole charged with dynamite. He died the same day.
Feb.	5	George Patriconis,	Lithuanian,	Miner,	34	M.	1	1	Maple Hill,		Instantly killed while in the act of lighting a squib to set off a blast. Before he could reach a place of safety the blast went off.
	13	William Petrekonas,	Lithuanian,	Miner,	22	S.	....	....	Maple Hill,		Fatally injured while in the act of lighting a squib to set off a blast. He died at the State Hospital, February 18
	26	Oscar Moyer,	German,	Laborer,	27	M.	1	1	Tunnel Ridge,		Instantly killed while working at the bottom of the slope. The rope broke and the car ran back on him.
March	2	John Jackolaluski,	Polish,	Miner,	33	M.	1	1	Suffolk,		Instantly killed by fall of coal.
	5	William Mitchell,	Lithuanian,	Miner,	39	M.	1	4	Tunnel Ridge,		Slightly burned by an explosion of gas. Died March 5 at the State Hospital.
	11	George Thomas,	Welsh,	Miner,	30	S.	....	....	Suffolk,		Fatally injured by fall of slate while working at the face of breast. Died at State Hospital, March 13.
	11	Frank Barnish,	Polish,	Miner,	30	S.	....	....	Park Place,		Instantly killed by fall of rock at the face of gangway.
	27	Bernard A. O'Donald,	American,	Miner,	32	M.	1	1	Primrose,		Fatally injured by fall of coal at face of gangway. Died same day.
April	12	Charles Uras,	Polish,	Laborer,	24	S.	....	....	North Mahanoy,		Instantly killed by fall of slate while loading a buggy at face of counter gangway.
	20	John Gillinski,	Lithuanian,	Laborer,	22	S.	....	....	Suffolk,		Fatally injured by fall of slate while working at the face of breast. Died at State Hospital, April 25.
	29	John Copley,	Irish,	Bottom-man,	26	M.	1	1	Mahanoy City,		Fatally injured by being caught between two cars. Died same day.

May	16	Enoch Yonkunas, ...,	Lithuanian,.	Miner, ...	40	S.	....	....	St. Nicholas, ...	Schuylkill,.....	Instantly killed by falling down a counter chute.
	22	Thomas Swede, ...	Polish,.......	Loader, ...	45	M.	1	....	Maple Hill, ...		Instantly killed by being caught between two P. and R. cars under breaker. Outside.
June	5	Matt. Suscabage, ...	Lithuanian,.	Miner, ...	38	M.	1	....	Maple Hill, ...		Instantly killed by fall of coal at face of breast.
	6	Charles Zachzefski, ..	Polish,.......	Miner, ...	37	M.	1	1	Suffolk, ...		Fatally injured by fall of coal at face of chute. Died same day.
	19	Joseph Coalhowich, ..	Polish,.......	Miner, ...	28	M.	1	1	Ellangowan, ...		Instantly killed while in the act of firing a blast. In lighting the squib it went off.
July	12	Anth. Lushinskey, ...	Lithuanian,.	Miner, ...	49	M.	1	7	Maple Hill, ...		Internally injured by rush of coal while working in breast. He died the next day.
	12	Michael Zincufski, ...	Polish,.......	Miner, ...	29	S.	....	....	Maple Hill, ...		Fatally injured by fall of coal while shoveling coal into the chute at the face of breast. He died the next day.
	17	Jacob Webb, ...	English,.....	Fire boss, ..	54	M.	1	6	North Mahanoy,		Fatally injured by gas explosion. While making his rounds in the morning a rush of coal and gas came down the manway. It punctured a hole in the gauze of his safety lamp, which caused the gas to explode, slightly burning him. He died July 27 from ulcers in the stomach, caused by the burns.
	19	Thomas Crosby, ...	American,...	Bottom-man,	25	S.	....	....	Primrose, ...		Instantly killed by falling down a slope.
	26	Frank Mahulskie, ...	Polish,.......	Oiler, ...	18	S.	....	....	Maple Hill, ...		Fatally injured by being caught in machinery while oiling one of the journals. He died the same day. Outside.
	27	Anthony Lounucunis,	Lithuanian,.	Miner, ...	45	M.	1	8	Mahanoy City, ..		Fatally injured by falling under a trip of mine cars. He died November 12 at the Philadelphia Hospital.
Aug.	10	Anthony Paszeswicz,	Polish,.......	Miner, ...	42	M.	1	1	Maple Hill, ...		Instantly killed by fall of slate while working in a gangway.
Sept.	11	Stiney Scharns, ...	Lithuanian,.	Miner, ...	30	M.	1	2	Tunnel Ridge, ..		Instantly killed by fall of coal while working at face of breast.
	23	Howard Dugan, ...	American,...	Slatepicker,	16	S.	....	....	North Mahanoy,		Fatally injured by machinery. He was caught between the crown wheel and pinion of machinery. He died the next day. Outside.
Oct.	12	Anthony Cappilla, ...	Italian,......	Rockman, ..	29	M.	1	....	Maple Hill, ...		Fatally injured by fall of rock while working on a rock-plane. He died October 21.
Nov.	2	John Kilroy, ...	Irish,.........	Miner, ...	42	M.	1	2	St. Nicholas, ...		Instantly killed by fall of slate while working at face of breast.
	2	Peter Ewasha, ...	Polish,.......	Doorboy, ...	16	S.	....	....	Maple Hill, ...		Fatally injured by being caught by a trip of mine cars. He fell asleep while tending the doors. He died the same day.
	8	Jacob Conrad, ...	German,.....	Miner, ...	39	M.	1	4	North Mahanoy,		Fatally injured by fall of coal while working at face of breast. He died at State Hospital, December 22.

TABLE 4.—Continued

Date of accident	Name of Person	Nationality	Occupation	Age	Married or single	Number of widows	Number of orphans	Name of Mine	County	Nature and Cause of Accident in Brief
Dec. 20	Mike Sokell, ...	Lithuanian..	Miner, ...	35	S.	....	....	Tunnel Ridge, ..	Schuylkill,.....	Instantly killed by fall of coal while placing a set of timber near face of gangway.

TABLE 5.—Non-fatal accidents inside and outside of mines

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Name of Mine	County	Nature and Cause of Accident in Brief
Jan.	15	John Iamm,	German,	Miner,	45	M.	Suffolk,	Schuylkill,	Leg broken by fall of coal at face of breast.
	17	Harry Martin,	American,	Driver,	18	S.	Primrose,		Leg broken by being dragged by mule on gangway.
	18	Max Smith,	Polish,	Laborer,	18	S.	Mahanoy City,		Arm broken by being caught in machinery of breaker. Outside.
Feb.	6	William Petlehet,	Lithuanian,	Miner,	22	M.	Primrose,		Leg broken by fall of slate at face of breast.
	11	Mike Lesto,	Slavonian,	Miner,	44	M.	North Mahanoy,		Leg broken by fall of coal at face of breast.
	15	James Nolan,	American,	Loader,	35	S.	Primrose,		Injured by being run over by trip of cars on gangway.
	23	Stiney Skalkouskie,	Polish,	Miner,	28	S.	Suffolk,		Slightly injured by fall of coal at face of gangway.
	23	Andr. Nigalango,	Italian,	Laborer,	29	S.	North Mahanoy,		Arm injured by being caught in machinery of fan. Outside.
March	2	Joe Sovckenus,	Lithuanian,	Miner,	25	S.	Maple Hill,		Injured by premature blast at face of breast.
	4	Thomas Alaburta,	Polish,	Miner,	31	S.	Suffolk,		Burned by gas at face of breast.
	4	Paul Zelestki,	Polish,	Miner,	31	M.			
	5	William Zaltras,	Lithuanian,	Laborer,	23	S.	Tunnel Ridge,		Burned by gas at face of chute.
April	12	Peter Sinkcavage,	Polish,	Laborer,	22	S.	St. Nicholas,		Leg broken by being caught between car and timber on gangway.
	19	Frank Boscavige,	Polish,	Miner,	33	M.	Ellangowan,		Caught between cars on gangway.
	19	Michael Minuts,	Slavonian,	Laborer,	36	S.	Park Place,		Injured by falling timber on gangway.
	22	Thomas Butler,	American,	Slatepicker,	15	S.	Ellangowan,		Injured by slipping from a banister to a shaker. Outside.
May	1	Andr. Krobin,	Slavonian,	Driver,	18	S.	North Mahanoy,		Injured by falling under car on gangway.
	6	Harry K. Hostler,	American,	Miner,	58	M.	North Mahanoy,		Injured by rush of coal at face of breast.
	7	Frank Botts,	Polish,	Miner,	31	S.	Primrose,		Leg injured by being caught between two lumps of coal at face of breast.
June	4	Peter Kemzura,	Lithuanian,	Laborer,	19	S.	North Mahanoy,		Back injured by fall of coal at face of heading.
	19	Lewis Waseck,	Polish,	Laborer,	28	M.	Ellangowan,		Injured by premature blast on gangway.
	27	John Sluzales,	Lithuanian,	Miner,	31	M.	Tunnel Ridge,		Burned by gas at face of gangway.

TABLE 5.—Continued

Date of accident	Name of Person	Nationality	Occupation	Age	Married or single	Name of Mine	County	Nature and Cause of Accident in Brief
July 2	George Deggrish, ...	Lithuanian, .	Laborer, ...	38	M.	Park Place, ...	Schuylkill, ...	Caught between car and platform on gangway.
15	George Caluskie, ...	Polish, ...	Miner, ...	37	M.	Ellangowan, ...		Caught by rush of coal in chute.
18	Steve Byronis, ...	Lithuanian, .	Miner, ...	28	S.	Primrose, ...		Injured by fall of coal at face of breast.
20	Lewis Takish, ...	Polish, ...	Miner, ...	36	M.	Park Place, ...		Leg broken by fall of rock at face of breast.
20	Alex Azavavage, ...	Polish, ...	Miner, ...	25	M.	Maple Hill, ...		Hand injured by premature blast on gangway.
26	John Burtasavige, ...	Polish, ...	Miner, ...	36	M.	Maple Hill, ...		Injured by fall of coal at face of breast.
Sept. 11	William Diminitus, ..	Polish, ...	Miner, ...	45	M.	Suffolk, ...		Burned by gas on gangway.
28	William Talaskey, ...	Lithuanian, .	Miner, ...	30	S.	Primrose, ...		Burned by gas at face of breast.
Oct. 1	Mike Dugan, ...	Lithuanian, .	Laborer, ...	26	M.	Tunnel Ridge, ...		Leg broken by fall of rock on gangway.
7	Mike Coperchinskie, ...	Polish, ...	Miner, ...	38	M.	Ellangowan, ...		Injured by fall of coal at face of breast.
11	Adam Rutsavage, ...	Polish, ...	Laborer, ...	29	S.	Maple Hill, ...		Injured by fall of coal in heading.
12	Anth. Laskey, ...	Lithuanian, .	Fan boy, ...	16	S.	North Mahanoy, ..		Injured by being caught between car and rib on gangway.
Nov. 7	Anth. Alestick, ...	Polish, ...	Miner, ...	35	M.	Ellangowan, ...		Injured by piece of rock rolling over him at face of breast.
Dec. 28	Alex Banko, ...	Polish, ...	Miner, ...	28	S.	Maple Hill, ...		Injured by fall of coal at face of breast.

CONDITION OF COLLIERIES

PHILADELPHIA AND READING COAL AND IRON COMPANY

Ellangowan Colliery.—Ventilation and road beds in good condition.

Maple Hill Colliery.—Ventilation and road beds in good condition.

Suffolk Colliery.—Ventilation and road beds in good condition.

St. Nicholas Colliery.—Ventilation and road beds in good condition.

Tunnel Ridge Colliery.—Ventilation and road beds in good condition.

Mahanoy City Colliery.—Ventilation and road beds in good condition.

North Mahanoy Colliery.—Ventilation and road beds in good con dition.

LENTZ AND COMPANY

Park No. 2 Colliery.—Ventilation and road beds in good condition.

LEHIGH VALLEY COAL COMPANY

Primrose Colliery.—Ventilation and road beds in good condition.

PRICE COAL COMPANY

High Point Colliery.—Ventilation and road beds in good condition.

IMPROVEMENTS

PHILADELPHIA AND READING COAL AND IRON COMPANY

Ellangowan Colliery.—Carpenter and blacksmith shop. Lumber shed. Settling tank with 24″ elevators.

Maple Hill Colliery.—A tunnel from Buck Mountain vein to Seven Foot vein, No. 1 Shaft level, total length, 42 1-3 yards.

A tunnel from Bottom Split to Seven Foot vein, No. 1 Shaft level, total length, 38 1-3 yards.

Extension of railroad track to top of timber wharf.

Lumber shed.

A tunnel from Buck Mountain vein to Bottom Split vein, No. 2 Shaft level, total length, 133 2-3 yards.

An air tunnel from Bottom Split to Middle Split, bore hole slope 1st lift, West Buck Mountain tunnel, total length 33½ yards.

St. Nicholas Colliery.—A tunnel to Top Split vein from West Bottom Split gangway, 3rd lift south dip, near Breast No. 71, total length, 55 yards.

Tunnel Ridge Colliery.—Lumber shed—Elmwood Section. Carpenter and blacksmith shop.

A tunnel to Skidmore and Seven Foot veins from Mammoth vein, for turnout for bottom of proposed extension of Tunnel Ridge. Hoisting slope to 3rd Lift, total length, 34 yards.

A tunnel to Buck Mountain vein, north dip, from Skidmore vein north dip, Tunnel Ridge 3rd Lift, total length, 39 2-3 yards.

Mahanoy City Colliery.—A tunnel from Seven Foot vein to Bottom Split, underground shaft, total length, 49 1-3 yards.

Rock airway on 50 degree pitch from Buck Mountain to Seven Foot vein, underground shaft, total length, 23 2-3 yards.

North Mahanoy Colliery.—A timber wharf 220 feet long by 90 feet wide.

A concrete arch at mouth of No. 2 hoisting slope 160 feet long.

LEHIGH VALLEY COAL COMPANY

Primrose Colliery, Outside

420 feet of 4″ flush jointed casing placed in Buck Basin rope hole to keep the water from destroying the rope.

Two fifty foot stacks placed on boilers.

The size of the fire line increased from 2″ to 3″, also the fire hose from 1½″ to 2½″.

Rebuilt 90 feet of lump coal chute.

Two six foot square stacks built, 90 feet high, extending through roof of breaker, and fans placed in them for the purpose of getting the dust out of the breaker.

Inside

An 8″x10″ Flory engine installed at the foot of the Four Foot basin slope.

A plane has been driven from No. 10 breast to Glendon on the West Ten Foot Glendon, 425 feet; electric haulage has been extended in the Klondike or south dip of Buck Mountain, a distance of 3478 feet, tracks laid with 40 lb. T rails.

Shaft completed at a distance of 208 feet, tunnel driven west of shaft 332 feet; from the tunnel there was a tunnel driven south 192 feet and a tunnel driven north 167 feet cutting Skidmore vein.

Mine Foremen's Examinations

The examination of applicants for certificates of qualification as Mine Foremen and Assistant Mine Foremen was held at Pottsville, in May, and the following person was recommended for a certificate:

Assistant Mine Foreman

John G. Saricks, Mahanoy City.

Thirteenth District

SCHUYLKILL COUNTY

Shenandoah, Pa., March 15, 1908.

Hon. James E. Roderick, Chief of Department of Mines:

Sir: In compliance with the law, I herewith transmit my annual report for the Thirteenth Anthracite District, for the year ending December 31, 1907.

The mines are in a satisfactory condition. There has been an increase of 653,771 tons in the production of this year over that of 1906.

Respectfully submitted,

A. B. LAMB,

Inspector.

SUMMARY OF STATISTICS

Number of collieries,	17
Number of mines,	22
Number of mines in operation,	22
Number of tons of coal shipped to market,	3,218,453
Number of tons used at mines for steam and heat,	430,446
Number of tons sold to local trade and used by employes,	57,848
Number of tons produced,	3,706,747
Number of tons produced by compressed air machines,	——
Number of tons produced by electrical machines,	——
Number of persons employed inside of mines,	5,100
Number of persons employed outside,	3,274
Number of fatal accidents inside of mines,	19
Number of fatal accidents outside,	10
Number of non-fatal accidents inside of mines,	34
Number of non-fatal accidents outside,	15
Number of tons of coal produced per fatal accident inside,	195,092
Number of persons employed per fatal accident inside,	268
Number of persons employed per fatal accident outside,	327
Number of persons employed per non-fatal accident inside,	150
Number of persons employed per non-fatal accident outside,	218
Number of wives made widows,	18
Number of children orphaned,	36
Number of steam locomotives used outside,	26
Number of compressed air locomotives used inside,	3
Number of electric motors used inside,	1
Number of fans in use,	23
Number of gaseous mines in operation,	21
Number of non-gaseous mines in operation,	1

TABLE A

PRODUCTION OF COAL

Names of Operators	Tons
Philadelphia and Reading Coal and Iron Company,	2,188,247
Lehigh Valley Coal Company,	542,487
Susquehanna Coal Company,	281,338
Thomas Colliery Company,	246,606
Brookwood Coal Company,	81,711
Gerber and Seaman,	57,276
Cambridge Coal Company,	53,292
H. H. Smith and Company,	116,224
Oxford Coal Company,	32,152
Brighton Coal Company,	107,414
Total,	3,706,747

Production by Counties

Schuylkill,	3,706,747

TABLE B. –Fatal and non-fatal accidents inside and outside of mines; number of tons of coal produced per accident; number of persons employed; number employed per accident

Names of Operators	Fatal Accidents			Non-fatal Accidents			Tons of coal produced per fatal accident inside	Tons of coal produced per non-fatal accident inside	Number of employes inside	Number of employes outside	Total number of employes	Number of employes inside per fatal accident	Number of employes outside per fatal accident	Number of employes inside per non-fatal accident	Number of employes outside per non-fatal accident
	Inside	Outside	Total	Inside	Outside	Total									
Philadelphia and Reading Coal and Iron Co.,..	13	8	21	28	5	33	168,327	78,152	3,563	2,038	5,601	274	255	127	407
Lehigh Valley Coal Co.,	2	1	3	4	4	8	271,243	135,622	650	427	1,077	325	427	162	107
Susquehanna Coal Co.,	2	1	3	1	2	3	140,669	281,338	450	243	693	225	243	450	121
Thomas Colliery Co.,	2	....	2	1	4	5	123,303	246,606	230	172	402	115	....	230	43
Miscellaneous companies,	....	....	....	....	....	....	....	....	207	394	601	....	....	....	....
Totals and averages for district,	19	10	29	34	15	49	195,092	109,021	5,100	3,274	8,374	268	327	150	218

TABLE C.—Classification of Fatal Accidents Inside and Outside of Mines

	Months													
	January	February	March	April	May	June	July	August	September	October	November	December	Totals	Percentages
Causes of Accidents Inside														
Falls of slate,	...	...	....	...	....	...	....	....	....	1	2	....	3	15.79
Falls of roof,	1	....	....	...	....	...	....	....	....	....	1	...	2	10.53
Mine cars,	1	....	....	....	2	....	....	....	1	1	2	....	7	36.84
Suffocation by gas, etc,,	1	....	....	...	....	...	....	....	....	....	...	...	1	5.26
Explosions of powder and dynamite,	...	....	....	...	....	...	1	...	...	...	...	...	1	5.26
Miscellaneous,	....	1	....	1	....	1	1	....	1	....	....	....	5	26.32
Totals,	3	1	....	1	2	1	2	....	2	2	5	....	19	100.00
Causes of Accidents Outside														
Cars,	....	....	....	....	....	....	....	....	1	....	1	1	3	30.00
Machinery,	....	....	....	...	2	...	....	....	....	1	....	1	4	40.00
Miscellaneous,	....	1	....	....	....	....	....	1	....	1	....	....	3	30.00
Totals,	....	1	....	....	2	....	....	1	1	2	1	2	10	100.00
Grand totals inside and outside,	3	2	...	1	4	1	2	1	3	4	6	2	29	

TABLE D.—Classification of Non-fatal Accidents Inside and Outside of Mines

	Months													
	January	February	March	April	May	June	July	August	September	October	November	December	Totals	Percentages
Causes of Accidents Inside														
Falls of coal,	3	1	....	....	....	...	....	2	....	....	....	...	6	17.64
Falls of slate,	...	1	...	...	1	...	....	....	....	....	....	....	2	5.88
Falls of roof,	...	...	1	...	...	...	....	1	...	....	...	...	2	5.88
Mine cars,	...	1	....	...	....	1	....	1	1	....	1	...	5	14.70
Explosions of gas and dust,	3	1	2	...	...	...	3	...	...	...	...	...	9	26.47
Explosions of powder and dynamite,	1	...	1	...	...	...	...	...	...	....	...	1	3	8.83
Premature blasts,	...	...	1	...	1	...	....	....	...	1	...	...	3	8.83
Falling into slopes, etc.,	...	1	...	...	...	...	...	...	...	....	...	...	1	2.94
Miscellaneous,	...	1	1	1	....	...	....	...	....	....	...	...	3	8.83
Totals,	7	6	6	1	2	1	3	4	1	1	1	1	34	100.00
Causes of Accidents Outside														
Cars,	...	...	...	...	1	1	1	....	1	....	...	...	4	26.67
Machinery,	....	1	....	...	....	1	1	...	1	1	...	1	6	40.00
Miscellaneous,	1	...	1	1	...	...	....	...	1	...	1	...	5	33.33
Totals,	1	1	1	1	1	2	2	...	3	1	1	1	15	100.00
Grand totals inside and outside,	8	7	7	2	3	3	5	4	4	2	2	2	49	

TABLE E.-Occupations of Persons Killed or Fatally Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Inside													
Miners,	1	....	....	....	....	1	1	....	1	1	2	....	7
Miners' laborers,	1	1	....	....	....	....	1	....	....	1	2	....	6
Drivers and runners,	....	....	....	....	1	....	....	....	....	....	1	....	2
All other employes,	1	....	....	1	1	....	....	....	1	....	....	....	4
Totals,	3	1	....	1	2	1	2	....	2	2	5	....	19
Outside													
Engineers and firemen,	....	....	....	....	....	....	....	....	....	1	....	....	1
Slatepickers (boys),	....	....	....	....	1	....	....	....	....	....	....	....	1
All other employes,	....	1	....	....	1	....	....	1	1	1	1	2	8
Totals,	....	1	....	....	2	....	....	1	1	2	1	2	10
Grand totals inside and outside,	3	2	....	1	4	1	2	1	3	4	6	2	29

TABLE F.—Occupations of Persons Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Inside													
Miners,	6	4	2	1	2	....	3	2	....	1	1	1	23
Miners' laborers,	1	2	2	....	....	....	....	....	....	....	....	....	5
Doorboys and helpers,	....	....	....	....	....	....	....	1	1	....	....	....	2
All other employes,	....	....	2	....	....	1	....	1	....	....	....	....	4
Totals,	7	6	6	1	2	1	3	4	1	1	1	1	34
Outside													
Blacksmiths and carpenters,	1	....	....	....	....	1	....	....	....	....	1	....	3
Slatepickers (boys),	....	1	....	....	....	....	1	....	....	....	....	....	2
All other employes,	....	....	1	1	1	1	1	....	3	1	....	1	10
Totals,	1	1	1	1	1	2	2	....	3	1	1	1	15
Grand totals inside and outside,	8	7	7	2	3	3	5	4	4	2	2	2	49

TABLE G.—Nationality of Persons Killed or Fatally Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
American,	....	....	....	....	1	....	....	....	1	1	1	....	4
Welsh,	....	....	....	....	....	....	....	....	....	....	1	....	1
Irish,	1	....	....	....	....	....	....	....	....	....	....	....	1
German,	....	....	....	....	....	....	....	....	....	....	1	....	1
Polish,	1	1	....	....	1	....	....	....	1	3	1	2	10
Italian,	....	....	....	....	....	....	....	1	....	....	1	....	2
Lithuanian,	....	....	....	1	....	1	2	....	1	....	1	....	6
Austrian,	....	....	....	....	1	....	....	....	....	....	....	....	1
Greek,	1	1	....	....	1	....	....	....	....	....	....	....	3
Totals,	3	2	....	1	4	1	2	1	3	4	6	2	29

TABLE H.—Nationality of Persons Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
American,	1	1	2	....	1	....	1	2	3	1	1	....	13
Irish,	....	....	....	....	....	1	....	....	....	....	....	....	1
German,	....	1	....	....	....	1	....	....	....	....	....	....	2
Polish,	4	4	1	....	1	....	....	....	1	1	1	....	13
Hungarian,	....	....	....	....	....	....	1	....	....	....	....	....	1
Italian,	....	....	1	1	....	....	....	1	....	....	....	....	3
Slavonian,	....	....	....	....	....	....	....	....	....	....	....	1	1
Lithuanian,	1	....	3	1	1	1	3	1	....	....	....	1	12
Russian,	....	1	....	....	....	....	....	....	....	....	....	....	1
Greek,	2	....	....	....	....	....	....	....	....	....	....	....	2
Totals,	8	7	7	2	3	3	5	4	4	2	2	2	49

TABLE I.—Operators and mines, kind of openings, type and size of fans, size of furnaces, volume of air produced by fan or furnace per minute, number of splits of air currents, and number of persons employed inside

Names of Operators and Mines	Kind of opening	Gaseous or non-gaseous	Method of ventilation	Diameter of fan in feet	Width of blades in feet	Depth of blades in feet	Number of revolutions per minute	Water gauge developed—in inches	Name of fan	Power used	Number of splits of air currents	Number of cubic feet of air per minute entering the mine at inlet	Total quantity of air per minute circulating in all the splits in cubic feet	Number of persons employed inside
Philadelphia and Reading Coal and Iron Co														
West Shenandoah,	Slope,	Gaseous,	Fan,	18	6.6	6	70	1	Guibal,	Steam,	10	165,667	81,167	364
Kohinoor,	Shaft,	Gaseous,	Fan,	18	6	4½	75	.5	Guibal,	Steam,	10	98,915	81,655	220
Turkey Run Colliery:														
Turkey Run,	Drift,	Gaseous,	Fan,	15	4	4¾	140	1.5	Guibal,	Steam,	10	148,730	110,010	628
No. 5,	Slope,	Gaseous,	Fan,	12	4	4	90	.5						
Draper,	Slope,	Gaseous,	Fans,	18	6.6	6	20	1.25	Guibal,	Steam,	11	135,458	51,648	......
				12	4	4	130	1.4						
				18	6.6	6	80	1						
Shenandoah City Colliery:														
Shenandoah City,	Shaft,	Gaseous,	Fan,	6x8	6	4½	75	2	Guibal,	Compressed air,	20	84,380	53,285	556
Shenandoah City,	Slope,													
Gilberton,	Slope,	Gaseous,	Fan,	21	7	6	70	1.8	Guibal,	Steam,	10	90,800	50,275	359
Knickerbocker,	Slope,	Gaseous,	Fan,	18	6.6	6	95	1.5	Guibal,	Steam,	9	64,302	50,192	342
Boston Run,	Slope,	Gaseous,	Fan,	21	7	6½	80	2	Guibal,	Steam,	10	78,320	60,500	246
Indian Ridge Colliery:														
Indian Ridge,	Shaft,	Gaseous,	Fan,	18	6	4½	75	1.1	Guibal,	Steam,	10	193,860	86,272	342
Indian Ridge,	Slope,	Gaseous,	Fans,	15	5	4¾	80	1						
				12	4	4	34	.3						

Susquehanna Coal Co														
William Penn Colliery:														
William Penn,	Shaft,	Gaseous,	Fan,	18	7	4½	90	1.8	Guibal,	Steam,	....	123,005	85,000	450
No. 1,	Drift,	Gaseous,	Fan,	18	7	4½	90	1.8						
No. 2,	Drift,	Gaseous,	Fan,	12	5	4	100	.8						
Lehigh Valley Coal Co.														
Packer Colliery:														
Packer No. 2,	Slope,	Gaseous,	Fan,	20	6	5	55	.3	Guibal,	Steam,	5	88,700	66,200	191
Packer No. 3,	Slope,	Gaseous,	Fan,	18	6	4½	70	.6	Guibal,	Steam,	8	96,580	34,915	255
Packer No. 4,	Slope,	Gaseous,	Fan,	20	6	4½	60	.7	Guibal,	Steam,	4	81,400	46,600	204
Thomas Colliery:														
Kehley's Run,	Slope,	Gaseous,	Fans,	12	4	4	100	1.2	Guibal,	Steam,	10	55,696	38,701	230
				16	4	6	75	.6						
Brookwood Coal Co.														
Stanton,	Slope,	Gaseous,	Fan,	15	4	4¾	4	2	Guibal,	Steam,	2	8,000	2,000	22
Gerber and Seaman														
Furnace,	Drift,	Gaseous,	Natural,	......	......	......	......	½	....	....	....	16,000	12,000	80
Cambridge Coal Co.														
Cambridge,	Drift,	Non-gas.	Fan,	......	......	......	......	......	Guibal,	Steam,	....	25,000	15,000	105

TABLE 1.—Operators, location of collieries, railroads, etc.

Names of Operators and Collieries	County	Name of General Superintendent	Post Office	Name of Superintendent	Post Office	Railroad to Mine
Philadelphia and Reading Coal and Iron Co						
West Shenandoah,	Schuylkill,	W. J. Richards,	Pottsville,	Reese Tasker,	Pottsville,	P. and R.
Kohinoor,						
Turkey Run,						
Draper,						
Shenandoah City,						
Gilberton,						
Knickerbocker,						
Boston Run,						
Indian Ridge,						
Plank Ridge Washery,						
Lehigh Valley Coal Co.						
Packer No. 2,	Schuylkill,	S. D. Warriner,	Wilkes-Barre,	J M. Humphrey,	Centralia,	Lehigh Valley
Packer No. 3,						
Packer No. 4,						
Susquehanna Coal Co.						
William Penn,	Schuylkill,	Robert A. Quinn,	Wilkes-Barre,	David V. Randall,	Shaft,	Pennsylvania
Thomas Colliery Co.						
Kehley's Run,	Schuylkill,	W. G. Thomas,	Shenandoah	....	....	P. and R.
Brookwood Coal Co.						
Stanton,	Schuylkill,	W. G. Thomas,	Hazleton,	W. G. Thomas,	Hazleton,	P. and R.
Gerber and Seaman						
Furnace,	Schuylkill,	M. H. Gerber,	Tamaqua,	....	....	P. and R.
Cambridge Coal Co.						
Cambridge,	Schuylkill,	D. R. James,	Shenandoah,	D. R. James,	Shenandoah,	P. and R.
H. H. Smith and Co.						
Hudson Washery,	Schuylkill,	Henry Myers,	Minersville,	R. R. Jones,	Shenandoah,	P. and R.
Brighton Coal Co.						
Brighton Washery,	Schuylkill,	....	....	R. R. Williams,	Frackville,	P. and R.
Oxford Coal Co.						
Oxford Washery,	Schuylkill,	W. G. Thomas,	Lost Creek,	Felix Klock,	Shenandoah,	P. and R.

TABLE 2.—Number of tons of coal mined, number of days worked, number of persons employed, number killed and injured, quantity of powder and dynamite used, etc.

Names of Operators and Collieries	County	Number of tons of coal shipped to market	Number of tons used at collieries for steam and heat	Number of tons sold to local trade and used by employes	Total production of coal in tons	Number of days worked	Number of employes	Number of fatal accidents	Number of non-fatal accidents	Number of kegs of powder used	Number of pounds of dynamite used	Number of horses and mules
Philadelphia and Reading Coal and Iron Co.												
West Shenandoah,	Schuylkill,	619,697	67,207	....	686,904	276	815	2	3	5,738	49.801	32
Kohinoor,							264	1	1	480	9,626	30
Turkey Run,							801	5	7	4,151	59,615	54
Draper,	Schuylkill,	326,550	16,166	....	342,716	272	757	2	6	3,571	141,203	68
Shenandoah City,		248,149	40,901	47,457	336,507	285	845	6	3	6,778	22,077	65
Gilberton,		179,505	61,626	2,673	213,804	270	597	2	1	1,458	82,000	46
Knickerbocker,		180,893	51,252	1,107	233,252	279	634	1	6	2,934	41,730	47
Boston Run,		132,630	34,042	13	166,685	282	413	1	3	1,645	69,722	22
Indian Ridge,		*155,350	....	....	155,350	279	397	....	3	4,979	11,274	62
Plank Ridge Washery,		20,566	2,463	....	23,029	......	78	1	....	....	....	......
Totals,	....	1,863,340	273,657	51,250	2,188,247	......	5,601	21	33	31,734	487.048	426
Lehigh Valley Coal Co.												
Packer No. 2,	Schuylkill,	161,983	15,456	....	177,439	267	239	1	....	1,669	13,523	26
Packer No. 3,		196,539	20	....	196,559	267	297	1	2	909	22,758	37
Packer No. 4,		108,177	58,235	2,077	168,489	267	541	1	6	3,210	8,827	34
Totals,	....	466,699	73,711	2,077	542,487	......	1,077	3	8	5,788	45.108	97
Susquehanna Coal Co.												
William Penn,	Schuylkill,	240,984	37,296	3,058	281,338	234	693	3	3	5,188	29,225	60

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*Shipped from Knickerbocker colliery.

TABLE 2.—Continued

Names of Operators and Collieries	County	Number of tons of coal shipped to market	Number of tons used at collieries for steam and heat	Number of tons sold to local trade and used by employes	Total production of coal in tons	Number of days worked	Number of employes	Number of fatal accidents	Number of non-fatal accidents	Number of kegs of powder used	Number of pounds of dynamite used	Number of horses and mules
Thomas Colliery Co. Kehley's Run,	Schuylkill,	229,504	16,570	532	246,606	271	402	2	5	4,350	10,150	29
Brookwood Coal Co. Stanton,	Schuylkill,	77,820	3,891	....	81,711	249	91	....	....	....	5,600	10
Gerber and Seaman Furnace,	Schuylkill,	50,526	6,750	....	57,276	251	142	....	....	50	3,300	12
Cambridge Coal Co. Cambridge,	Schuylkill,	49,518	2,856	918	53,292	238	133	....	....	1,140	3,125	9
H H. Smith and Co. Hudson Washery,	Schuylkill,	110,690	5,534	....	116,224	......	64	....	....	....	....	......
Brighton Coal Co. Brighton Washery,	Schuylkill,	99,438	7,976	....	107,414	......	95	....	....	....	....	4
Oxford Coal Co. Oxford Washery,	Schuylkill,	29,934	2,205	13	32,152	......	76	....	....	....	....	3
Grand totals,	....	3,218,453	430.446	57,848	3,706,747	......	8,374	29	49	48,250	583,556	650

TABLE 2.—Part 2

Names of Operators	County	Number of Boilers					Locomotives			Number of steam engines of all classes	Total horse power	Number of pumps delivering water to surface	Capacity in gallons per minute	Quantity delivered to surface per minute—gallons	Number of electric dynamos	Number of air compressors
		Cylindrical	Horse power	Tubular	Horse power	Total horse power	Steam	Air	Electric							
Philadelphia and Reading Coal and Iron Co,	Schuylkill, ...	4	120	126	17,175	17,295	10	3	1	150	21,855	17	28,060	9,500	2	12
Lehigh Valley Coal Co.,		......	....	20	4,200	4,200	4	......	......	61	6,600	8	6,666	2.570	......	......
Susquehanna Coal Co.,		......	....	13	1,850	1,850	1	......	......	19	1,585	1	1,500	819	......	......
Thomas Colliery Co.,		......	....	10	1,400	1,400	2	......	......	11	500	3	3,800	600	......	......
Brookwood Coal Co.,		......	....	5	625	625	2	......	......	14	526	....	....	....	......	......
Gerber and Seaman,		......	....	6	375	375	......	......	......	8	120	1	360	150	......	......
Cambridge Coal Co.,		......	....	3	300	300	1	......	......	4	100	....	....	....	......	......
H. H. Smith and Co.,		......	....	3	375	375	1	......	......	6	260	....	....	....	......	......
Brighton Coal Co.,		......	....	8	900	900	3	......	......	13	628	....	....	....	......	......
Oxford Coal Co.,		......	....	5	550	550	2	......	......	6	131	2	1,000	....	......	......
Totals,	....	4	120	199	27,750	27,870	26	3	1	292	32,305	32	41,386	13,639	2	12

TABLE 3.—Number of each class of employes inside and outside of mines

Names of Operators and Collieries	County	Inside											Outside										
		Mine foremen	Assistant mine foremen	Fire bosses and assistants	Miners	Miners' laborers	Drivers and runners	Doorboys and helpers	Pumpmen	Company men	All other employes	Total inside	Superintendents	Foremen	Blacksmiths and carpenters	Engineers and firemen	Slatepickers (boys)	Slatepickers (men)	Bookkeepers and clerks	All other employes	Total outside	Grand total inside and outside
Philadelphia and Reading Coal and Iron Co.																						
West Shenandoah,	Schuylkill,	....	2	5	123	107	16	10	2	34	65	364	....	4	12	33	104	46	6	246	451	815
Kohinoor,		1	....	3	35	85	19	......	2	46	29	220	....	1	3	20	......	......	1	19	44	264
Turkey Run,		1	1	7	92	219	26	15	2	144	121	628	....	....	6	15	......	......	1	151	173	801
Draper,		1	....	6	135	84	36	7	......	127	110	506	....	2	11	23	41	37	3	134	251	757
Shenandoah City,		1	1	9	184	138	40	5	3	78	97	556	....	2	9	26	92	18	4	138	289	845
Gilberton,		1	....	5	81	80	23	......	......	120	49	359	....	2	8	39	39	17	4	129	238	597
Knickerbocker,		1	1	8	81	64	16	3	2	100	66	342	....	2	7	26	90	34	3	130	292	634
Boston Run,		1	...	3	62	59	15	1	2	47	56	246	....	1	5	21	43	6	3	88	167	413
Indian Ridge,		1	1	5	59	111	18	4	4	90	49	342	....	1	5	13	......	......	4	32	55	397
Plank Ridge Washery,		.....	...	....	......	......	......	......	......	......	......	......	....	1	2	11	9	5	1	49	78	78
Totals,	....	8	6	51	852	947	209	45	17	786	642	3,563	....	16	68	227	418	163	30	1,116	2,038	5,601
Lehigh Valley Coal Co.																						
Packer No. 2,	Schuylkill,	1	3	1	68	33	17	2	4	......	62	191	....	1	3	12	......	......	1	31	48	239
Packer No. 3,		1	4	1	63	89	20	6	6	......	65	255	....	1	3	6	......	......	1	31	42	297
Packer No. 4,		1	3	2	96	25	17	4	6	......	50	204	1	2	15	39	58	......	5	217	337	541
Totals,	....	3	10	4	227	147	54	12	16	......	177	650	1	4	21	57	58	......	7	279	427	1,077
Susquehanna Coal Co.																						
William Penn,	Schuylkill,	1	....	6	163	57	86	3	7	120	7	450	1	1	20	26	67	12	6	110	243	693
Thomas Colliery Co.																						
Kehley's Run,	Schuylkill,	1	....	2	111	32	10	7	5	62	......	230	....	1	9	16	75	......	3	68	172	402

Brookwood Coal Co. Stanton,	Schuylkill,	1	....	1	5	6	3	.....	.....	2	4	22	....	1	2	8	17	4	1	36	69	91
Gerber and Seaman Furnace,	Schuylkill,	1	....	1	30	29	7	1	2	9	......	80	1	1	4	6	30	9	1	10	62	142
Cambridge Coal Co. Cambridge,	Schuylkill,	2	1	....	33	54	4	1	......	8	2	105	....	1	2	6	5	3	1	10	28	133
H. H. Smith and Co. Brighton Washery,	Schuylkill,	....	....	....	......	......	......	......	......	......	......	......	1	1	3	8	5	3	1	42	64	64
Brighton Coal Co. Oxford Washery,	Schuylkill,	....	....	....	......	......	......	......	......	......	......	......	1	1	5	10	15	3	1	59	95	95
Oxford Coal Co. Oxford Washery,	Schuylkill,	....	....	....	.....	......	......	......	......	......	......	......	2	1	4	8	10	......	1	50	76	76
Grand totals,		17	17	65	1,421	1,272	373	69	47	987	832	5,100	7	28	138	372	700	197	52	1,780	3,274	8,374

TABLE 3.—Part 2

Names of Operators and Collieries	County	Number of Days Worked in Breaker												
		January	February	March	April	May	June	July	August	September	October	November	December	Total
Philadelphia and Reading Coal and Iron Co.														
West Shenandoah, ... Kohinoor, ... Turkey Run, ...	Schuylkill, ...	22	21	19	25	24	24	24	23	23	26	22	23	276
Draper, ...	Schuylkill, ..	24	21	18	23	25	24	22	23	24	26	20	22	272
Shenandoah City, ...		26	22	19	25	24	25	24	23	24	26	23	24	285
Gilberton, ...		22	20	17	25	23	24	23	22	23	25	23	23	270
Knickerbocker, ...		25	21	19	25	24	24	24	22	24	26	23	22	279
Boston Run, ...		25	22	18	25	25	23	24	23	24	26	23	24	282
Indian Ridge, ...		25	21	19	25	24	24	24	22	24	26	23	22	279
Lehigh Valley Coal Co.														
Packer No. 2, ...	Schuylkill, ..	22	17	21	24	22	25	22	24	22	25	22	21	267
Packer No. 3, ...		22	17	21	24	22	25	22	24	22	25	22	21	267
Packer No. 4, ...		22	17	21	24	22	25	22	24	22	25	22	21	267
Susquehanna Coal Co.														
William Penn, ...	Schuylkill, ...	22	20	21	21	20	21	16	19	19	21	18	16	234
Thomas Colliery Co.														
Kehley's Run, ...	Schuylkill, ...	24	22	24	25	26	24	22	14	20	26	22	22	271
Brookwood Coal Co.														
Stanton, ...	Schuylkill, ...	24	23	24	23	24	23	....	8	27	26	24	23	249
Gerber and Seaman														
Furnace, ...	Schuylkill, ...	22	20	20	21	22	22	21	20	20	23	21	19	251
Cambridge Coal Co.														
Cambridge, ...	Schuylkill, ...	23	19	22	21	20	20	21	14	18	22	19	19	238

TABLE 4.—Fatal accidents inside and outside of mines

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Number of widows	Number of orphans	Name of Mine	County	Nature and Cause of Accident in Brief
Jan.	3	John Kalbuskie,	Polish,	Miner,	25	S.	....	....	Shenandoah City,	Schuylkill,	Fatally burned by gas. Died January 4.
	10	Lucis Wallis,	Greek,	Laborer,	41	M.	1	3	Packer No. 3,		Killed by fall of rock.
	28	William Whitaker,	Irish,	Repairman,	62	M.	1	....	Shenandoah City,		Killed by cars.
Feb.	6	Michael Shannok,	Greek,	Feeder,	55	M.	1	6	William Penn,		Killed by falling over baluster. Outside.
	6	Leio Solbritus,	Polish,	Laborer,	33	M.	1	....	Shenandoah City,		Killed in attempting to jump on moving cage.
April	22	William Gregus,	Lithuanian,	Loader,	37	M.	1	6	William Penn,		Killed by being struck by timber thrown down timber chute.
May	8	George Streke,	Greek,	Driver,	26	M.	1	2	William Penn,		Killed by cars.
	8	Edward Nicholas,	American,	Footman,	31	S.	....	....	Packer No. 2,		Killed by being struck by car on slope. Clevis pin pulled out.
	17	Joseph Rigley,	Austrian,	Slatepicker,	15	S.	....	....	Draper,		Killed by machinery. Outside.
	27	Mike Cowell,	Polish,	Laborer,	33	S.	....	....	Kohinoor,		Killed by being caught in sheave wheel. Outside.
June	6	Joseph Yanohatis,	Lithuanian,	Miner,	25	M.	1	1	Boston Run,		Killed by being struck by coal in manway.
July	10	Mike Olefsky,	Lithuanian,	Miner,	28	S.	....	....	Draper,		Killed by explosion of powder and dynamite.
	23	George Zitsus,	Lithuanian,	Laborer,	27	S.	....	....	Gilberton,		Fatally injured. Collar slipped from leg, crushing him. Died September 16.
Aug.	28	Lee Sunday,	Italian,	Laborer,	42	M.	1	2	Packer No. 4,		Killed by being struck on head by sheet iron thrown from breaker. Outside.
Sept.	12	William Shevoick,	Polish,	Loader,	33	M.	1	....	Turkey Run,		Found dead with wound in chest. Cause of accident unknown.
	12	Victor Ryuskie,	Lithuanian,	Miner,	45	M.	1	4	Shenandoah City,		Killed by being crushed between car and timber.
	30	James K. Horrell,	American,	Laborer,	18	S.	....	....	Plank Ridge Washery,		Killed by having head crushed between cars. Outside.
Oct.	9	William Bitler,	American,	Fireman,	48	M.	1	1	West Shenandoah,		Fatally scalded by steam. He died the next day. Outside.
	19	William Kissel,	Polish,	Ashman,	45	M.	1	....	Gilberton,		Killed by machinery. Outside.
	21	Stiney Trumbovich,	Polish,	Laborer,	22	M.	1	....	Turkey Run,		Killed by being struck by cars at bottom of slope.
	30	William Kalvikites,	Polish,	Miner,	40	S.	....	....	West Shenandoah,		Killed by fall of slate.

TABLE 4.—Continued

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Number of widows	Number of orphans	Name of Mine	County	Nature and Cause of Accident in Brief
Nov.	2	Edward Brobst, ...	American,...	Driver, ...	22	S.	....	....	Kehley's Run, ...	Schuylkill,	Fatally crushed between cars. Died the same day.
	2	Daniel Puddi, ...	Italian,......	Dumpman,	40	M.	1	....	Turkey Run, ...		Fatally injured by falling under locomotive. Died the same day. Outside.
	15	George Trumph, ...	German,.....	Miner, ...	55	M.	1	3	Turkey Run, ...		Killed by fall of slate.
	15	Joseph Sterkuskes, ...	Lithuanian,.	Miner, ...	38	M.	1	2	Turkey Run, ...		Killed by fall of slate.
	17	Robert Thomas, ...	Welsh,.......	Laborer, ...	26	S.	....	....	Kehley's Run, ...		Killed on slope. Head crushed between car and overhead pulley.
	25	Stiney Winger, ...	Polish,.......	Laborer, ...	24	M.	1	1	Shenandoah City, ..		Killed by being crushed between the end of car and timber.
Dec.	20	Stephen Karran, ...	Polish,.......	Loader, ...	22	S.	...	....	Knickerbocker, ...		Crushed to death by cars under breaker. Outside.
	31	John Smith, ...	Polish,.......	Laborer, ...	64	M.	1	5	Shenandoah City, ..		Killed by being caught in machinery. Outside.

TABLE 5.—Non-fatal accidents inside and outside of mines

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Name of Mine	County	Nature and Cause of Accident in Brief
Jan.	3	Peter Shetcavage,	Polish,	Miner,	31	M.	Shenandoah City,	Schuylkill,	Face and hands burned by gas.
	8	William Kaseman,	American,	Carpenter,	35	M.	William Penn,		Nose fractured by piece of timber falling on him. Outside.
	9	John Sulots,	Polish,	Miner,	29	S.	Knickerbocker,		Face and hands burned by powder.
	18	Anth. Dumblefskie,	Polish,	Miner,	44	M.	Turkey Run,		Leg broken by fall of coal.
	23	Lucas Pulinskie,	Greek,	Miner,	31	M.	Turkey Run,		Face and hands burned by gas.
	23	Paul Mansa,	Greek,	Laborer,	27	S.	Turkey Run,		Face and hands burned by gas.
	25	John Petchock,	Polish,	Miner,	55	M.	Shenandoah City,		Leg broken by fall of coal.
	28	Peter Kisle,	Lithuanian,	Miner,	38	M.	Draper,		Leg broken by fall of coal.
Feb.	9	Peter Marcofkie,	Polish,	Laborer,	33	S.	Packer No 3,		Leg broken by falling off car and catching foot in side hook.
	9	August Prigger,	Russian,	Miner,	38	M.	Indian Ridge,		Leg broken by fall of slate.
	13	Louis Kline,	German,	Miner,	49	M.	Knickerbocker,		Leg broken by falling down manway.
	18	Lewis Swartz,	Polish,	Miner,	48	M.	Packer No. 4,		Right hand seriously injured by fall of coal.
	19	Peter Wharlock,	Polish,	Laborer,	22	M.	Turkey Run,		Leg broken by collar falling on him.
	21	Thomas Cannon,	American,	Slatepicker,	14	S.	Kehley's Run,		Shoulder dislocated. Caught in machinery. Outside.
	26	William Zuibrosky,	Polish,	Miner,	28	M.	Turkey Run,		Burned by gas.
March	13	Luigi Castalsle,	Italian,	Laborer,	21	S.	West Shenandoah,		Collar bone and ribs broken. Struck by dipper of steam shovel. Outside.
	25	Joseph Brown,	American,	Starter,	55	M.	Boston Run,		Hands blown off by dynamite.
	26	Andrew Dolbinskie,	Lithuanian,	Laborer,	30	S.	Draper,		Arm broken by fall of rock.
	28	Anth. Petruskie,	Polish,	Laborer,	32	M.	Turkey Run,		Leg fractured by falling timber.
	28	George Miller,	American,	Starter,	25	M.	Boston Run,		Hand smashed by explosion of blast.
	30	Adam Vachunas,	Lithuanian,	Miner,	34	M.	Draper,		Face and hands burned by gas.
	30	Peter Zidder,	Lithuanian,	Miner,	26	M.	Draper,		Face and hands burned by gas.
April	5	William Powell,	Italian,	Laborer,	34	M.	Packer No. 4,		Face severely injured by falling from railroad car. Outside.
	23	Mike Cumpus,	Lithuanian,	Miner,	45	M.	Gilberton,		Bruised about face and head. Struck by piece of coal and knocked down manway.
May	2	Martin Savacco,	Lithuanian,	Miner,	39	M.	Kohinoor,		Head and leg bruised by premature blast.
	8	Alex Fallinskie,	Polish,	Laborer,	62	M.	West Shenandoah,		Hip dislocated by cars. Outside.

TABLE 5.—Continued

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Name of Mine	County	Nature and Cause of Accident in Brief
May	27	Thomas Snyder,	American,	Miner,	29	M.	Kehley's Run,	Schuylkill,	Back and face injured by fall of slate.
June	19	Joseph Nickosh,	German,	Carpenter,	58	M.	Packer No. 4,		Leg crushed by cars. Outside.
	19	Frank Ansewicz,	Lithuanian,	Loader,	22	M.	William Penn,		Severely lacerated about face and head by being caught by cars.
	24	Leo Clemens,	Irish,	Jig runner,	16	S.	Kehley's Run,		Arm severely lacerated. Caught in machinery. Outside.
July	3	Felix Custowage,	Lithuanian,	Miner,	42	M.	Draper,		Hands and face burned by gas.
	3	Felix Lautofskie,	Lithuanian,	Miner,	29	M.	Draper,		Hands and face burned by gas.
	18	Peter Kalbena,	Hungarian,	Miner,	20	M.	Boston Run,		Hands and face burned by gas.
	18	Pius Kozlowskie,	Lithuanian,	Slatepicker,	14	S.	Kehley's Run,		Leg crushed. Caught in machinery. Outside.
	24	Archie Fishburn,	American,	Loader,	21	M.	Packer No. 4,		Hand lacerated. Crushed by cars. Outside.
Aug.	5	Alex Subloskie,	American,	Doorboy,	17	S.	Turkey Run,		Leg cut and bruised by cars.
	12	John Butch,	Italian,	Chargeman,	22	M.	Shenandoah City,		Leg broken by fall of rock.
	16	Joe Whitlagatis,	Lithuanian,	Miner,	23	S.	Indian Ridge,		Leg broken by fall of coal.
	26	Joe McGee,	American,	Miner,	28	M.	Packer No. 3,		Back bruised and head lacerated by fall of coal.
Sept.	12	George Kulney,	Polish,	Laborer,	18	S.	Knickerbocker,		Hand smashed by cars. Outside.
	17	John Shirey,	American,	Outside boss,	47	M.	Knickerbocker,		Back and leg injured. Crushed by rock in dump chute. Outside.
	21	John Hanlon,	American,	Doorboy,	18	S.	Packer No. 4,		Collar bone broken. Crushed by cars.
	24	Arthur Morris,	American,	Jig runner,	18	S.	West Shenandoah,		Arm broken. Caught in machinery. Outside.
Oct.	5	George Mozer,	American,	Oiler,	18	S.	Kehley's Run,		Arm broken and head lacerated. Caught in machinery. Outside.
	25	John Gober,	Polish,	Miner,	40	S.	Knickerbocker,		Head and body injured by premature blast.
Nov.	6	Adam Muscavage,	Polish,	Miner,	28	M.	Knickerbocker,		Crushed around body. Caught between car and timber.
	21	Ed. Masterson,	American,	Blacksmith,	38	M.	Packer No. 4,		Eye seriously injured. Struck by flying piece of steel. Outside.
Dec.	4	Michael Blaschak,	Slavonian,	Oiler,	25	M.	William Penn,		Hand smashed by machinery. Outside.
	24	Anth. Copinskie,	Lithuanian,	Miner,	44	M.	Indian Ridge,		Face, hands and leg burned by powder.

CONDITION OF COLLIERIES

PHILADELPHIA AND READING COAL AND IRON COMPANY

Shenandoah City.—Ventilation and drainage good.

Draper.—Ventilation and drainage good.

Turkey Run.—Ventilation and drainage good.

Gilberton.—Ventilation fair; drainage good.

Knickerbocker.—Ventilation and drainage excellent.

Boston Run.—Ventilation and drainage good.

West Shenandoah.—Ventilation and drainage good.

Kohinoor.—Ventilation fair; drainage good. The principal work done is robbing.

Indian Ridge.—Ventilation fair; drainage good.

LEHIGH VALLEY COAL COMPANY

Packer No. 2.—Ventilation and drainage fair. The principal work done is robbing.

Packer Nos. 3 and 4.—Ventilation and drainage fair.

SUSQUEHANNA COAL COMPANY

William Penn.—Ventilation and drainage fair.

THOMAS COLLIERY COMPANY

Kehley's Run.—Ventilation good; drainage fair.

CAMBRIDGE COAL COMPANY

Cambridge.—Ventilation and drainage fair.

BROOKWOOD COAL COMPANY

Stanton.—General condition fair.

IMPROVEMENTS

PHILADELPHIA AND READING COAL AND IRON COMPANY

Draper.—Traffic tunnel from East Orchard gangway to East Diamond gangway, 2nd lift, total length, 33 yards.

Rock hole for air from the West Buck Mountain to Seven Foot vein, 4th lift, total length, 35 yards.

Tunnel from East Diamond counter gangway to the Sphon vein, total length, 73 1-3 yards.

Installed on 2nd lift off East Orchard gangway the following:

Compound Duplex Goyne pump, 19 inch diameter high pressure steam cylinder by 32 inch diameter low pressure steam cylinder by 12 inch diameter water cylinder by 48 inch stroke.

10″x16″x18″ P. and R. condenser, with pump with all necessary steam and column pipes.

Gilberton.—Tunnel to Little Buck vein from West Buck Mountain gangway, 3rd lift, total length, 14 yards.

Tunnel to Little Buck vein from East Buck Mountain gangway, Furnace lift, total length, 42 yards.

West Shenandoah.—Bore holes Nos. 1, 2, 3 and 4 for slushing, 125, 119, 290 and 168 feet deep, respectively.

Tunnel from Buck Mountain vein to Little vein, length, 28 1-3 yards.

Tunnel from Buck Mountain vein to Little vein, length 18 2-3 yards.

Electric haulage power plant.

Tunnel from West Shenandoah to Turkey Run driven 2580 feet, 743 feet remain to be driven.

Turkey Run.—Tunnel from Seven Foot to Bottom Split, length 41 yards.

Tunnel from Buck Mountain to Little Buck, length 5 2-3 yards.

Electric lighting system in water level drift.

No. 8 slope in 4 Foot vein at Turkey Run sunk a total distance of 335 feet.

Shenandoah City.—Two additional tubular boilers installed.

Tunnel from Buck Mountain to Top Split vein, length 43 yards.

Tunnel from Bottom Split to Top Split vein, length 26 yards.

Boston Run.—Tunnel to Holmes vein from West Top Split gangway, 3rd lift, total length 100 1-3 yards.

Kohinoor.—Bore hole No. 16 from Surface to Mammoth vein for slushing, depth 366 feet.

Bore holes Nos. 17, 18 and 19 from Surface to prove inversion of Mammoth vein, 306, 350 and 364 feet deep respectively.

Indian Ridge.—Tunnel from Bottom Split to Skidmore vein, length 14 2-3 yards.

Tunnel from Skidmore to Bottom Split vein, length 30 2-3 yards.

12 foot fan at Holmes slope.

Knickerbocker.—Tunnel from Holmes to Holmes, length 39 1-3 yards.

Tunnel from Bottom Split to Bottom Split, length 28 1-3 yards.

LEHIGH VALLEY COAL COMPANY

Packer No. 2.—Inside. A 7′x10′ tunnel was driven 122 feet on the No. 2 level, from Seven Foot to Buck Mountain vein. New pump house, 10 feet wide, 10 feet high and 60 feet long on No. 2 level.

A 7′x10′ tunnel was driven 185 feet on the No. 5 level, from the Top Split to Bottom Split, Mammoth vein. Also opening the gangways on the east and west side in the Top Split, and on the east side in the Bottom Split. New office and warehouse built.

Packer No. 3.—Outside. Placed at Mammoth stripping, west of slope on top of hill a pair of 12″x12″ engines to hoist rock and clay from top of Mammoth vein. The engines also lower the coal in mine cars to the level of the stripping. An emergency hospital built outside.

Packer No. 3.—Inside. A 7′x10′ tunnel was driven from Mammoth to Mammoth overlap, a distance of 187 feet. A 1½″ diamond drill hole was drilled on theNo. 2 level, from the bottom slate of the Buck Mountain to Little Buck, a distance of 67 feet, for proving the vein.

A 7′x10′ tunnel was driven east of slope, from Mammoth to Skidmore vein, 75 feet.

A 7′x10′ tunnel was driven on the second level in the West Skidmore vein inside the point of previous robbing, in order to get the coal not taken out by previous robbing.

Packer No. 4.—Outside. Two shakers installed in front of jigs on south side of breaker. 50 new mine cars built. Four 48″x72′ steel stacks placed on boilers. One brick engine house built and one 12″x16″ Erie City engine placed in it for operating ash and boiler fuel conveyor line. 300 feet of 8 inch iron pipe erected from wash pump to breaker for fire purposes. Concrete house built over the fire valves on above line. 200 feet of 36 inch terra cotta pipe laid to drain water from breaker. A new 28 ton locomotive put in service for hauling coal from Packer No. 2 to No. 4. Emergency hospital built outside.

Packer No. 4.—Inside. A 7′x10′ tunnel driven from the Skidmore to the Seven Foot on No. 1 level. On the No. 4 level a new pump house of modern type, secured by iron and entirely fire proof, was built in the Buck Mountain vein and the pumps from Mammoth and Buck 5th level placed in same. A new traveling way from the 4th level to the 3rd level Buck.

THOMAS COLLIERY COMPANY

Kehley's Run.—Tender slope driven in Buck Mountain vein from second level to surface, to hoist men and let down timber. A new 12 inch cast iron pump discharge line. A new 14 foot fan installed to ventilate the Buck Mountain vein. Two additional return tubular boilers, of 150 horse power each, installed. Four additional shakers and five Hazleton jigs installed. Two additional engines erected to run the conveyor lines separately.

SUSQUEHANNA COAL COMPANY

William Penn.—100 New steel body mine cars placed in service. One two-stage Ingersoll compressor, and building for same, erected. Tunnel from the Four Foot vein to Orchard, No. 2 level.

Inside. Rock plane from Little Buck Mountain to Buck Mountain, No. 3 level.

Mine Foremen's Examinations

The annual examination of applicants for certificates of qualification as Mine Foremen and Assistant Mine Foremen, was held in Pottsville, May 8 and 9. The Board of Examiners was composed of the following members: A. B. Lamb, Inspector; William Auman, Superintendent; George H. Young, miner; George Keller, miner.

The following applicants were recommended for certificates of qualification:

Assistant Mine Foremen

Samuel Starr, Shenandoah; Thomas Cummings, Shenandoah; Richard Kane, Shenandoah.

Fourteenth District

COLUMBIA AND SCHUYLKILL COUNTIES

Centralia, Pa., February 28, 1908.

Hon. James E. Roderick, Chief of Department of Mines:

Sir: I have the honor of transmitting herewith the annual report of the Fourteenth Anthracite District, for the year ending December 31, 1907.

Respectfully submitted,

JAMES A. O'DONNELL,

Inspector.

SUMMARY OF STATISTICS

Number of collieries,	10
Number of mines,	26
Number of mines in operation,	21
Number of tons of coal shipped to market,	2,423,504
Number of tons used at mines for steam and heat,	246,296
Number of tons sold to local trade and used by employes,	42,805
Number of tons produced,	2,712,605
Number of tons produced by compressed air machines,	—
Number of tons produced by electrical machines,	—
Number of persons employed inside of mines,	3,514
Number of persons employed outside,	2,361
Number of fatal accidents inside of mines,	11
Number of fatal accidents outside,	2
Number of non-fatal accidents inside of mines,	37
Number of non-fatal accidents outside,	8
Number of tons of coal produced per fatal accident inside,	246,600
Number of persons employed per fatal accident inside,	319
Number of persons employed per fatal accident outside,	1,180
Number of persons employed per non-fatal accident inside,	95
Number of persons employed per non-fatal accident outside,	295
Number of wives made widows,	5
Number of children orphaned,	7
Number of steam locomotives used outside,	23
Number of compressed air locomotives used inside,	3
Number of electric motors used inside,	5
Number of fans in use,	21
Number of gaseous mines in operation,	17
Number of non-gaseous mines in operation,	4
Number of new mines opened,	5

TABLE A

PRODUCTION OF COAL

Names of Operators	Tons
Philadelphia and Reading Coal and Iron Company, ...	1,350,981
Lehigh Valley Coal Company, ...	685,808
Midvalley Coal Company, ...	416,568
Girard Mammoth Coal Company, ...	136,605
W. R. McTurk Coal Company, ...	75,061
Raven Run Coal Company, ...	43,968
Dreshman Coal Company, ...	3,614
Total, ...	2,712,605

Production by Counties

Schuylkill, ...	1,651,651
Columbia, ...	1,060,954
Total, ...	2,712,605

TABLE B.—Fatal and non-fatal accidents inside and outside of mines; number of tons of coal produced per accident; number of persons employed; number employed per accident

Names of Operators	Fatal Accidents			Non-fatal Accidents			Tons of coal produced per fatal accident inside	Tons of coal produced per non-fatal accident inside	Number of employes inside	Number of employes outside	Total number of employes	Number of employes inside per fatal accident	Number of employes outside per fatal accident	Number of employes inside per non-fatal accident	Number of employes outside per non-fatal accident
	Inside	Outside	Total	Inside	Outside	Total									
Philadelphia and Reading Coal and Iron Co.,	6	....	6	18	4	22	225,164	75,055	1,641	1,298	2,939	273	....	91	324
Lehigh Valley Coal Co.,	4	1	5	10	4	14	171,452	68,581	1,067	398	1,465	267	398	107	99
Midvalley Coal Co.,	1	1	2	9	....	9	416,568	46,285	545	278	823	545	278	61	....
Miscellaneous companies,	....	....	....	....	....	....	....	....	261	387	648	....	....	....	....
Totals and averages for district,	11	2	13	37	8	45	246,600	73,314	3,514	2,361	5,875	319	1,180	95	295

TABLE C.—Classification of Fatal Accidents Inside and Outside of Mines

	Months													
	January	February	March	April	May	June	July	August	September	October	November	December	Totals	Percentages
Causes of Accidents Inside														
Falls of coal,	....	....	....	....	....	....	....	1	1	1	....	....	3	27.28
Falls of roof,	....	....	....	1	....	....	....	....	....	....	....	....	1	9.09
Mine cars,	....	1	....	....	....	....	....	....	....	....	....	....	1	9.09
Premature blasts,	....	....	....	....	....	....	....	....	1	....	1	....	2	18.18
Falling into slopes, etc.,	....	....	....	....	....	....	....	1	....	....	....	....	1	9.09
Crushed at batteries,	....	....	....	....	....	....	1	....	....	....	....	....	1	9.09
Miscellaneous,	....	....	....	....	....	....	1	1	....	....	....	....	2	18.18
Totals,	....	1	....	1	....	....	2	3	2	1	1	....	11	100.00
Causes of Accidents Outside														
Suffocation in chutes, etc.,	....	....	....	....	....	....	1	....	....	....	....	....	1	50.00
Miscellaneous,	....	....	....	....	....	....	....	....	....	1	....	....	1	50.00
Totals,	....	....	....	....	....	....	1	....	....	1	....	....	2	100.00
Grand totals inside and outside,	....	1	....	1	....	....	3	3	2	2	1	....	13	

TABLE D.—Classification of Non-fatal Accidents Inside and Outside of Mines

	Months													
	January	February	March	April	May	June	July	August	September	October	November	December	Totals	Percentages
Causes of Accidents Inside														
Falls of coal,	....	1	....	2	....	....	....	....	1	....	....	....	4	10.81
Falls of roof,	....	....	....	1	....	....	....	....	....	....	....	....	1	2.70
Mine cars,	1	....	2	....	1	3	....	2	....	....	1	....	10	27.03
Explosions of gas and dust,	....	....	2	....	....	2	....	....	....	1	....	....	5	13.51
Explosions of powder and dynamite,	....	1	....	1	....	....	....	....	....	1	....	....	3	8.11
Premature blasts,	....	....	....	....	....	1	....	....	....	....	....	....	1	2.70
Falling into slopes, etc.,	....	....	....	....	....	1	1	....	....	....	....	....	2	5.41
Crushed at batteries,	....	....	1	....	1	....	....	....	....	....	....	....	2	5.41
Mules,	1	....	....	....	1	....	....	1	....	....	....	....	3	8.11
Miscellaneous,	1	....	1	1	....	....	....	1	....	1	....	1	6	16.22
Totals,	3	2	6	5	3	7	1	4	1	3	1	1	37	100.00
Causes of Accidents Outside														
Cars,	....	....	....	....	....	....	....	1	1	....	....	....	2	25.00
Machinery,	....	....	....	....	....	....	....	1	....	....	....	1	2	25.00
Miscellaneous,	....	1	1	....	....	1	....	....	....	....	1	....	4	50.00
Totals,	....	1	1	....	....	1	....	2	1	....	1	1	8	100.00
Grand totals inside and outside	2	3	7	5	3	8	1	6	2	3	2	2	45	

TABLE E.—Occupations of Persons Killed or Fatally Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Inside													
Miners,	....	....	....	....	....	....	1	2	2	....	1	....	6
Miners' laborers,	....	....	....	1	....	....	....	1	....	1	....	....	3
Doorboys and helpers,	....	1	....	....	....	....	....	....	....	....	....	....	1
All other employes,	....	....	....	....	....	...	1	....	....	....	....	....	1
Totals,	....	1	....	1	....	....	2	3	2	1	1	....	11
Outside													
All other employes,	....	....	....	....	....	....	1	....	....	1	....	....	2
Totals,	....	....	....	....	....	....	1	....	....	1	....	....	2
Grand totals inside and outside,	....	1	....	1	....	....	3	3	2	2	1	....	13

TABLE F.—Occupations of Persons Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Inside													
Miners,	....	1	2	3	1	4	1	....	1	1	....	1	15
Miners' laborers,	1	1	....	2	1	1	....	1	....	1	....	....	8
Drivers and runners,	1	....	....	....	1	1	....	2	....	....	....	....	5
Doorboys and helpers,	....	....	2	....	....	....	....	....	....	....	....	....	2
All other employes,	1	....	2	....	....	1	....	1	....	1	1	....	7
Totals,	3	2	6	5	3	7	1	4	1	3	1	1	37
Outside													
All other employes,	....	1	1	....	....	1	....	2	1	....	1	1	8
Totals,	....	1	1	....	....	1	....	2	1	....	1	1	8
Grand totals inside and outside,	3	3	7	5	3	8	1	6	2	3	2	2	45

TABLE G.—Nationality of Persons Killed or Fatally Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
American,	....	1	....	....	....	....	1	....	....	....	....	....	2
German,	....	....	....	....	....	....	....	....	....	1	....	....	1
Italian,	....	....	....	....	....	....	1	....	....	....	....	...	1
Polish,	....	....	....	1	....	....	1	....	....	....	1	....	3
Slavonian,	....	....	....	....	....	....	....	....	....	1	....	....	1
Lithuanian,	....	....	....	....	....	....	....	2	1	....	....	....	3
Russian,	....	....	....	....	....	....	....	1	1	....	....	....	2
Totals,	....	1	....	1	....	....	3	3	2	2	1	....	13

TABLE H.—Nationality of Persons Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
American,	2	1	3	2	1	2	....	2	....	....	1	1	15
English,	....	....	2	....	....	1	....	....	....	....	....	....	3
Welsh,	....	....	....	....	....	....	....	....	1	....	....	....	1
Scotch,	....	....	....	1	....	....	....	....	....	....	....	....	1
Irish,	....	....	2	1	1	2	1	....	....	....	1	....	8
German,	....	1	....	....	1	1	....	....	....	1	....	....	4
Polish,	1	....	....	....	....	2	....	3	....	1	....	....	7
Italian,	....	....	....	....	....	....	....	....	1	....	....	....	1
Slavonian,	....	1	....	....	....	....	....	1	....	....	....	....	2
Lithuanian,	....	....	....	1	....	....	....	....	....	1	....	....	2
Greek,	....	....	....	....	....	....	....	....	....	....	....	1	1
Totals,	3	3	7	5	3	8	1	6	2	3	2	2	45

TABLE I.—Operators and mines, kind of openings, type and size of fans, size of furnaces, volume of air produced by fan or furnace per minute, number of splits of air currents, and number of persons employed inside

Names of Operators and Mines	Kind of opening	Gaseous or non-gaseous	Method of ventilation	Diameter of fan in feet	Width of blades in feet	Depth of blades in feet	Number of revolutions per minute	Water gauge developed—in inches	Name of fan	Power used	Number of splits of air currents	Number of cubic feet of air per minute entering the mine at inlet	Total quantity of air per minute circulating in all the splits in cubic feet	Number of persons employed inside
Philadelphia and Reading Coal and Iron Co.														
Hammond Colliery:														
Hammond Buck,	Slope,	Gaseous,	Fan,	15	5	4	90	1.8	Guibal,	Steam,	12	160,000	110,000	607
Hammond Mammoth,	Slope,	Gaseous,	Fan,	21	7	6	80	1.8						
Potts Colliery:														
Potts Primrose,	Slope,	Gaseous,	4 fans,	18	6	4.5	110	2.2	Whiting,	Steam,	14	180,000	120,000	406
Potts Mammoth,														
Bast Colliery:														
Bast Buck,	Slope,	Gaseous,	2 fans,	18	5	5	90	2	Guibal,	Steam,	10	160,000	120,000	409
Bast Mammoth,														
Bear Ridge Colliery:														
Bear Ridge,	Slope,	Gaseous,	Fan,	18	5	5	80	1.5	Guibal,	Steam,	8	70,000	60,000	219
Lehigh Valley Coal Co.														
Centralia Colliery:														
Centralia,	Slope,	Gaseous,	3 fans,	12 14 15	4 3.5 3	4 4 5	67	5.3	Guibal,	Steam,	7	50,000	40,000	218
Continental,	Shaft,	Gaseous,	Fan,	20	6	6.66	65	1	Guibal,	Steam,	7	42,000	32,000	143
Logan,	Tunnel,	Gaseous,	Fan,	12	4	3	99	.43	Guibal,	Steam,	4	35,000	25,000	45
Big Mine Run,	Drift,	Gaseous,	Natural,								5	20,000	10,000	5
Locust Run,	Slope,	Gaseous,	Steam exhaust,											

Packer No. 5 Colliery:														
Packer No. 5,	Shaft,	Gaseous,	Fan,	20	6	5.5	75	1.3	Guibal,	Steam,	14	130,000	120,000	306
Packer No. 5,	Slope,	Gaseous,	Fan,	16	5	5	60	1.4	Guibal,	Steam,	11	87,000	67,000	244
Midvalley Coal Co.														
Midvalley Colliery:														
Midvalley No. 1,	Slope,	Gaseous,	Fan,	18	5.5	5	80	1.2	Vulcan,	Steam,	6	74,000	54,000	223
Midvalley No. 2,	Slope,	Gaseous,	Fan,	24	8	7	70	1.5	Vulcan,	Steam,	8	90,000	60,000	253
Midvalley No. 1,	Drift,	Non-gas.	Fan,	6	3	2	150	.4	Sturdevant,	Steam,	2	20,000	10,000	54
Girard Mammoth Coal Co.														
Girard Mammoth Colliery:														
Girard Mammoth No. 1,	Slope,	Non-gas.	Fan,	6	3	2	100	1.5	Sturdevant,	Steam,	2	40,000	25,000	103
Girard Mammoth No. 2,	Slope,	Non-gas.	Natural,	......	......	......	......	......	....	....	2	14,000	10,000	28
Girard Mammoth No. 1,	Drift,	Non-gas.	Natural,	......	......	......	......	......	....	....	1	8,000	5,000	26
W. R. McTurk Coal Co.														
Girard-Bear Ridge,	Slope,	Gaseous,	Fan,	12	5	4	128	1.1	Guibal,	Steam,	4	40,000	30,000	97

TABLE 1.—Operators, location of collieries, railroads, etc.

Names of Operators and Collieries	County	Name of General Superintendent	Post Office	Name of Superintendent	Post Office	Railroad to Mine
Philadelphia and Reading Coal and Iron Co.						
Hammond,	Schuylkill,	W. J. Richards,	Pottsville,	Reese Tasker,	Pottsville,	P. and R.
Potts,	Columbia,					
Bast,	Schuylkill,					
Bear Ridge,	Schuylkill,					
Lehigh Valley Coal Co.						
Centralia,	Columbia,	S. D. Warriner,	Wilkes-Barre,	J. M. Humphrey,	Centralia,	Lehigh Valley
Packer No. 5,	Schuylkill,					
Locust Run,	Columbia,					
Midvalley Coal Co.						
Midvalley,	Columbia,	J. S. Wentz,	Philadelphia,	T. E. Snyder,	Wilburton,	Lehigh Valley
Girard Mammoth Coal Co.						
Girard Mammoth,	Schuylkill,			H. K. Christ,	Mahanoy City,	P. and R.
W. R. McTurk Coal Co.						
Girard-Bear Ridge,	Schuylkill,	W. R. McTurk,	Philadelphia,	Jacob M. Holt,	Girardville,	P. and R.
Raven Run Coal Co.						
Raven Run Washery,	Schuylkill,	Wm. G. Thomas,	Hazleton,	G. Laudeman,	Minersville,	P. and R.
Dreshman Coal Co.						
Pioneer,	Schuylkill,	John Dreshman,	Ashland,			

TABLE 2.—Number of tons of coal mined, number of days worked, number of persons employed, number killed and injured, quantity of powder and dynamite used, etc.

Names of Operators and Collieries	County	Number of tons of coal shipped to market	Number of tons used at collieries for steam and heat	Number of tons sold to local trade and used by employes	Total production of coal in tons	Number of days worked	Number of employes	Number of fatal accidents	Number of non-fatal accidents	Number of kegs of powder used	Number of pounds of dynamite used	Number of horses and mules
Philadelphia and Reading Coal and Iron Co.												
Hammond,	Schuylkill,	408,478	26,534	7,019	442,031	283	1,114	4	9	2,097	198,896	64
Potts,	Columbia,	304,997	46,426	7,216	358,639	279	717	2	5	....	101,815	94
Bast,	Schuylkill,	331,060	51,184	7,277	389,521	281	712	......	5	....	93,182	90
Bear Ridge,	Schuylkill,	142,294	17,007	1,489	160,790	277	396	......	3	687	26,243	46
Totals,		1,186,829	141,151	23,001	1,350,981	....	2,939	6	22	2,784	420,136	294
Lehigh Valley Coal Co.												
Centralia,	Columbia,	250,180	32,125	3,442	285,747	198	735	2	8	864	158,873	78
Packer No. 5,	Schuylkill,	383,875	16,186	....	400,061	268	712	3	6	5,857	79,156	90
Locust Run,	Columbia,	....	....	....	....	....	18	......	......	....	....	2
Totals,		634,055	48,311	3,442	685,808	....	1,465	5	14	6,721	238,029	170
Midvalley Coal Co.												
Midvalley,	Columbia,	376,570	36,500	3,498	416,568	269	823	2	9	2,171	170,657	124
Girard Mammoth Coal Co.												
Girard Mammoth,	Schuylkill,	122,863	13,000	742	136,605	247	363	......	.....	1,462	16,371	26
W. R. McTurk Coal Co.												
Girard-Bear Ridge,	Schuylkill,	61,802	4,939	8,320	75,061	171	243	......	.....	36	14,425	26

TABLE 2.—Continued

Names of Operators and Collieries	County	Number of tons of coal shipped to market	Number of tons used at collieries for steam and heat	Number of tons sold to local trade and used by employes	Total production of coal in tons	Number of days worked	Number of employes	Number of fatal accidents	Number of non-fatal accidents	Number of kegs of powder used	Number of pounds of dynamite used	Number of horses and mules
Raven Run Coal Co. Raven Run Washery,	Schuylkill,	41,385	2,120	463	43,968	....	33	......	.....	....	250	....
Dreshman Coal Co. Pioneer,	Schuylkill,	....	275	3,339	3,614	269	9	......	.....	....	900	3
Grand totals,	....	2,423,504	246,296	42,805	2,712,605	....	5,875	13	45	13,174	860,768	643

TABLE 2.— PART 2

Names of Operators	County	Number of Boilers					Locomotives			Number of steam engines of all classes	Total horse power	Number of pumps delivering water to surface	Capacity in gallons per minute	Quantity delivered to surface per minute—gallons	Number of electric dynamos	Number of air compressors
		Cylindrical	Horse power	Tubular	Horse power	Total horse power	Steam	Air	Electric							
Philadelphia and Reading Coal and Iron Co.	Schuylkill and Columbia,	12	360	52	7,280	7,640	4	3	......	60	7,375	19	21,520	14,200	......	3
Lehigh Valley Coal Co.,	Schuylkill and Columbia,	15	555	25	3,750	4,305	4	......	5	64	7,462	5	8,466	3,443	2	1
Midvalley Coal Co.,	Columbia,	....	....	16	3,000	3,000	10	......	......	10	889	6	5,330	5,330	......	1
Girard Mammoth Coal Co.,	Schuylkill,	....	....	4	1,750	1,750	3	......	......	13	1,370	4	8,000	3,000	......	......
W. R. McTurk Coal Co.,		....	....	8	1,075	1,075	2	......	......	9	530	......	....	....	......	......
Raven Run Coal Co.,		....	....	2	250	250	.....	......	......	7	338	......	....	....	......	......
Dreshman Coal Co.,		....	....	1	100	100	.....	......	......	1	50	......	....	....	......	......
Totals,	....	27	915	108	17,205	18,120	23	3	5	164	18,014	34	43,316	25,973	2	5

TABLE 3.—Number of each class of employes inside and outside of mines

Names of Operators and Collieries	County	Inside											Outside									Grand total inside and outside
		Mine foremen	Assistant mine foremen	Fire bosses and assistants	Miners	Miners' laborers	Drivers and runners	Doorboys and helpers	Pumpmen	Company men	All other employes	Total inside	Superintendents	Foremen	Blacksmiths and carpenters	Engineers and firemen	Slate pickers (boys)	Slate pickers (men)	Bookkeepers and clerks	All other employes	Total outside	
Philadelphia and Reading Coal and Iron Co.																						
Hammond,	Schuylkill,	1	1	8	178	71	24	**13**	4	161	146	607	....	2	10	28	112	47	2	306	507	1,114
Potts,	Columbia,	2	....	9	115	51	33	25	4	81	86	406	....	2	9	25	60	23	3	189	311	717
Bast,	Schuylkill,	2	....	10	88	22	27	25	4	116	115	409	....	2	12	31	42	23	3	190	303	712
Bear Ridge,	Schuylkill,	1	....	3	61	51	14	4	......	54	31	219	....	1	6	20	27	25	2	96	177	396
Totals,		6	1	30	442	195	98	67	12	412	378	1,641	....	7	37	104	241	118	10	781	1,298	2,939
Lehigh Valley Coal Co.																						
Centralia,	Columbia,	5	6	1	190	97	44	6	2	......	161	512	....	3	23	24	40	......	3	130	223	735
Packer No. 5,	Schuylkill,	1	8	1	128	98	37	10	1	......	266	550	....	1	12	14	......	......	1	134	162	712
Locust Run,*	Columbia,	....	....	1	......	......	......	......	2	......	2	5	....	1	....	5	......	......	......	7	13	18
Totals,		6	14	3	318	195	81	16	5	......	429	1,067	....	5	35	43	40	......	4	271	398	1,465
Midvalley Coal Co.																						
Midvalley,	Columbia,	2	2	6	206	170	71	10	6	55	17	545	1	2	16	24	65	40	5	125	278	823
Girard Mammoth Coal Co.																						
Girard Mammoth,	Schuylkill,	2	1	....	39	40	9	4	4	32	29	160	1	1	6	19	38	43	2	93	203	363

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*Pumping station

W. R. McTurk Coal Co. Girard-Bear Ridge,	Schuylkill,	1	....	2	27	17	7	5	......	38	......	97	1	2	8	14	38	......	3	80	146	243
Raven Run Coal Co. Raven Run Washery,	Schuylkill,	....	....	....	......	......	......	......	......	......	......	......	1	1	....	6	2	......	......	23	33	33
Dreshman Coal Co. Pioneer,	Schuylkill,	....	....	....	2	1	1	......	......	......	......	4	....	....	....	1	......	1	......	3	5	9
Grand totals,		17	18	41	1,034	618	267	102	27	537	853	3,514	4	18	102	211	424	202	24	1,376	2,361	5,875

TABLE 3.—Part 2

Names of Operators and Collieries	County	Number of Days Worked in Breaker												
		January	February	March	April	May	June	July	August	September	October	November	December	Total
Philadelphia and Reading Coal and Iron Co.														
Hammond,	Schuylkill,	26	21	19	25	25	25	24	22	24	25	23	24	283
Potts,	Columbia,	25	20	17	25	25	24	23	23	24	26	23	24	279
Bast,	Schuylkill,	25	22	17	25	25	23	24	23	24	26	23	24	281
Bear Ridge,	Schuylkill,	24	22	19	25	25	24	23	23	24	26	22	20	277
Lehigh Valley Coal Co.														
Centralia,	Columbia,	....	....	....	19	23	22	23	23	19	25	22	22	198
Packer No. 5,	Schuylkill,	22	17	21	24	22	25	22	25	22	25	22	21	268
Midvalley Coal Co.														
Midvalley,	Columbia,	22	18	21	24	22	24	24	24	21	24	22	23	269
Girard Mammoth Coal Co.														
Girard Mammoth,	Schuylkill,	3	22	21	20	24	20	22	25	24	23	20	23	247
W. R. McTurk Coal Co.														
Girard-Bear Ridge,	Schuylkill,	20	20	23	24	22	23	....	....	....	....	19	20	171
Dreshman Coal Co.														
Pioneer,	Schuylkill,	19	20	21	22	24	23	24	24	23	25	24	20	269

TABLE 4.—Fatal accidents inside and outside of mines

Date of Accident		Name of Person	Nationality	Occupation	Age	Married or single	Number of widows	Number of orphans	Name of Mine	County	Nature and Cause of Accident in Brief
Feb.	11	John Sartis, ...	American,...	Doortender,	17	S.	....	....	Potts, ...	Columbia,.......	Instantly killed by cars. The driver brought a trip of empty cars into the inside turnout and stopped to speak to the fire boss. Sartis hitched the team to a loaded car 90 feet inside of turnout and started the team. The switch was set for empty track, and while Sartis was trying to unhitch the spreader he was bumped between the cars.
April	22	Alexander Laveski, ..	Polish,.......	Laborer, ...	25	S.	....	....	Midvalley, ...	Columbia,.......	Instantly killed by fall of rock. He and several others were making a head for a balance plane when the rock fell.
July	9	Dominick Comri, ...	Italian,......	Laborer, ...	24	S.	....	....	Centralia, ...	Columbia,.......	Instantly killed by being drawn through the buckwheat coal pocket in breaker. No one knew he was in the pocket. His body was found by the loaders. Outside.
	12	Michael Pickus, ...	Polish,.......	Miner, ...	29	M.	1	....	Packer No. 5,.......	Schuylkill,......	Instantly killed between the cage and the side of shaft. He attempted to get on cage after the signal had been given the engineer to hoist the cage.
	20	Francis McCann, ...	American,...	Starter, ...	24	S.	....	....	Potts, ...	Columbia,.......	Instantly killed by rush of coal in chute. He was in the act of placing a charge of dynamite on a lump of coal in the battery when the coal rushed out and caught him.
Aug.	19	Joe Podomanskie, ...	Lithuanian,.	Laborer, ...	28	S.	....	....	Hammond, ...	Schuylkill,.....	Fatally injured by falling timber. Died September 1. He was helping to stand timber and did not use a platform or a car. The collar got beyond control and fell on him and broke his neck.
	26	George Keritas, ...	Lithuanian,.	Miner, ...	42	M.	1	5	Hammond, ...		Instantly killed by fall of coal. He was nailing a plank on the breast manway when he was caught by the coal.

TABLE 4.—Continued

Date of Accident	Name of Person	Nationality	Occupation	Age	Married or single	Number of widows	Number of orphans	Name of Mine	County	Nature and Cause of Accident in Brief
Aug. 26	John Wisonofskee, ...	Russian.....	Miner, ...	26	M.	1	....	Packer No. 5,....	Schuylkill,.....	Killed by falling down the breast manway while going away from a blast. Two of the steps were broken out and he failed to repair them before starting to work. He lost his balance where the steps were broken and fell.
Sept. 17	Peter Dankus, ...	Russian,.....	Miner, ...	26	M.	1	1	Packer No. 5,....		Instantly killed by fall of coal. He fired a blast and went back to see the result when he was caught by the coal.
27	Anthony Putkenous, .	Lithuanian,.	Miner, ...	30	M.	1	1	Hammond, ...		Fatally injured by blast. Died the next day. He placed a charge of dynamite on old timber and in lighting the squib he used a lamp instead of touch paper. The flame from his lamp ignited the squib and the blast exploded while he was in front of it.
Oct. 4	Jacob Marguarts, ...	German,.....	Laborer, ...	52	S.	....	....	Hammond, ...		Instantly killed by fall of coal. He cut out a set of timbers and the coal above the timber fell on him.
19	John Kulick, ...	Slavonian,...	Laborer, ...	19	S.	....	....	Midvalley, ...	Columbia,.......	Instantly killed by lump of coal rolling down the breaker plane and striking him on the head while he was oiling pulleys. Outside.
Nov. 21	Joe Oranick, ...	Polish,.......	Miner, ...	31	S.	....	....	Centralia, ...	Columbia,.......	Fatally injured by blast. Died November 23. He was tamp'ng dynamite in a hole with iron pipe when it exploded.
8	Anthony Bridgon,* ...	....	....	....	...	....	....	Midvalley, ...	Columbia,.......	Killed by blast. He was blasting rock in a trench on the mountain one-half mile north of the colliery for a water line for colliery and houses. He prepared a blast on a rock and when he applied the match to the fuse the blast exploded, killing him.

*Not charged to mining.

TABLE 5.—Non-fatal accidents inside and outside of mines

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Name of Mine	County	Nature and Cause of Accident in Brief
Jan.	7	John Smith,	Polish,	Driver,	37	S.	Midvalley,	Columbia,	Skull fractured. Kicked by mule.
	21	George Mallams,	American,	Laborer,	24	M.	Potts,	Columbia,	Body bruised by gunboat on slope.
	28	Henry Prichard,	American,	Repairman,	52	M.	Potts,	Columbia,	Ribs fractured by rush of coal.
Feb.	6	James Davidson,	American,	Laborer,	26	M.	Packer No. 5,	Schuylkill,	Hands lacerated by explosion of dynamite caps.
	6	Oncolia Marchock,	Slavonian,	Laborer,	26	S.	Packer No. 5,	Schuylkill,	Leg fractured by rush of slate in stripping. Outside.
	23	H. S. Facer,	German,	Miner,	34	M.	Hammond,	Schuylkill,	Arm fractured and head lacerated by fall of coal.
March	2	Frank Dean,	American,	Doortender,	18	S.	Potts,	Columbia,	Arm fractured by cars.
	4	Bernard Welsh,	Irish,	Timberman,	36	M.	Bast,	Schuylkill,	Ribs fractured by jack slipping.
	8	John Gorman,	Irish,	Repairman,	30	S.	Hammond,	Schuylkill,	Concussion of the brain from fall in breaker. Outside.
	9	William Tull,	English,	Miner,	45	M.	Hammond,	Schuylkill,	Hands and face burned by explosion of gas.
	9	James Todd,	English,	Miner,	45	S.	Hammond,	Schuylkill,	Hands and face burned by explosion of gas.
	11	John McCann,	American,	Starter,	25	S.	Potts,	Columbia,	Hand fractured by rush of coal at battery.
	16	James Lynch,	American,	Doortender,	16	S.	Bast,	Schuylkill,	Arm fractured by cars.
April	11	Morgan Henchey,	Irish,	Miner,	57	M.	Midvalley,	Columbia,	Hand blown off by dynamite.
	11	John Monahan,	American,	Laborer,	33	S.	Bast,	Schuylkill,	Hand fractured by falling timber.
	22	Alphenis Barr,	Scotch,	Miner,	45	M.	Midvalley,	Columbia,	Leg fractured by fall of rock.
	25	Anthony Socouskie,	Lithuanian,	Miner,	21	M.	Packer No. 5,	Schuylkill,	Leg fractured by fall of coal.
	25	Theodore Stelfox,	American,	Laborer,	19	S.	Midvalley,	Columbia,	Leg fractured by fall of coal.
May	10	Patrick Boyle,	Irish,	Laborer,	51	M.	Bast,	Schuylkill,	Arm fractured. Caught between mule and car.
	11	John Beck,	German,	Miner,	29	S.	Hammond,	Schuylkill,	Foot crushed at battery.
	27	Walter Snyder,	American,	Runner,	16	S.	Centralia,	Columbia,	Ribs fractured by cars.
June	3	Charles Revenis,	Polish,	Runner,	21	S.	Midvalley,	Columbia,	Leg fractured by cars.
	10	James Jenings,	American,	Laborer,	40	S.	Centralia,	Columbia,	Leg fractured by cars.
	11	Charles Strincuski,	Polish,	Miner,	34	M.	Midvalley,	Columbia,	Shoulder fractured by flying coal from blast.
	12	William Finn,	Irish,	Miner,	55	M.	Hammond,	Schuylkill,	Hands and face burned by explosion of gas.

TABLE 5.—Continued

Date of accident	Name of Person	Nationality	Occupation	Age	Married or single	Name of Mine	County	Nature and Cause of Accident in Brief
June 12	Albert Fenstmaher, ..	German, ...	Miner, ...	32	M.	Hammond, ...	Schuylkill, ...	Hands and face burned by explosion of gas.
20	Nathaniel Williams, .	English, ...	Headman, ...	28	M.	Bear Ridge, ...	Schuylkill, ...	Leg and ribs fractured by cars.
29	William Clews, ...	American, ...	Laborer, ...	16	S.	Centralia, ...	Columbia, ...	Arm fractured by falling in breaker. Outside.
29	John Rowland, ...	Irish, ...	Miner, ...	36	S.	Packer No. 5, ...	Schuylkill, ...	Head lacerated by falling down breast.
July 12	Michael Tighe, ...	Irish, ...	Miner, ...	59	M.	Centralia, ...	Columbia, ...	Shoulder and ribs fractured by falling down breast.
Aug. 7	Isaac Stokes, ...	American, ...	Shoer, ...	49	M.	Midvalley, ...	Columbia, ...	Ribs fractured by cars.
12	Frank Zanaramco, ...	Polish, ...	Driver, ...	19	S.	Packer No. 5, ...	Schuylkill, ...	Ribs fractured. Caught between mule and car.
16	Austin Nitcuski, ...	Polish, ...	Laborer, ...	28	M.	Midvalley, ...	Columbia, ...	Ribs fractured by falling timber.
20	John Pelick, ...	Polish, ...	Laborer, ...	44	M.	Centralia, ...	Columbia, ...	Leg fractured by cars. Outside.
26	Elex Harbist, ...	Slavonian, ..	Driver, ...	18	S.	Bear Ridge, ...	Schuylkill, ...	Rib fractured by cars.
30	Thomas Hansbury, ...	American, ...	Roll-tender, ...	15	S.	Bear Ridge, ...	Schuylkill, ...	Leg crushed by rolls. Outside.
Sept. 9	Joe Filachanni, ...	Italian, ...	Rockman, ...	47	M.	Packer No. 5, ...	Schuylkill, ...	Leg fractured by cars. Outside.
16	Ben Evans, ...	Welsh, ...	Miner, ...	47	M.	Centralia, ...	Columbia, ...	Arm crushed and ribs fractured by fall of coal.
Oct. 3	John Shobert, ...	German, ...	Laborer, ...	45	S.	Centralia, ...	Columbia, ...	Pelvis fractured by falling timber.
7	John Povalosky, ...	Polish, ...	Miner, ...	24	S.	Midvalley, ...	Columbia, ...	Burned by explosion of gas.
26	Anthony Bolavage, ...	Lithuanian, .	Starter, ...	23	S.	Hammond, ...	Schuylkill, ...	Hand blown off by dynamite.
Nov. 13	William Burns, ...	Irish, ...	Footman, ...	29	S.	Hammond, ...	Schuylkill, ...	Skull fractured by cars coming back on slope.
22	John Samar, ...	American, ...	Laborer, ...	18	S.	Bast, ...	Schuylkill, ...	Skull fractured by piece of rock falling on him from chute under breaker. Outside.
Dec. 6	William Schmoole, ...	American, ...	Feeder, ...	17	S.	Potts, ...	Columbia, ...	Leg fractured by scraper line. Outside.
10	Michael Valcovage, ..	Greek, ...	Miner, ...	33	M.	Centralia, ...	Columbia, ...	Leg fractured by jumping off platform.

CONDITION OF COLLIERIES

PHILADELPHIA AND READING COAL AND IRON COMPANY

Hammond Colliery.—Ventilation good, roads and drainage good. Condition as to safety good.

Bast Colliery.—Ventilation good, roads and drainage good. Condition as to safety good.

Potts Colliery.—Ventilation good, roads and drainage good. Condition as to safety good.

Bear Ridge Colliery.—Ventilation good, roads and drainage good. Condition as to safety fair.

LEHIGH VALLEY COAL COMPANY

Packer Number 5 Colliery.—Ventilation good, roads and drainage good. Condition as to safety good.

Centralia Colliery.—Ventilation good, roads and drainage good. Condition as to safety good.

MIDVALLEY COAL COMPANY

Midvalley Colliery.—Ventilation good, roads and drainage good. Condition as to safety good.

GIRARD MAMMOTH COAL COMPANY

Girard Mammoth Colliery.—Ventilation fair, roads and drainage fair. Condition as to safety good.

W. R. McTURK COAL COMPANY

Girard-Bear Ridge Colliery.—Ventilation fair, roads and drainage good. Condition as to safety good.

IMPROVEMENTS

LEHIGH VALLEY COAL COMPANY

Packer No. 5 Colliery.—An electric haulage plant has been installed on the shaft level. The power for this plant is generated by a 250 K. W. Thompson-Ryan dynamo, 250 volts, and the generator is directly connected with a McEwen 19″ and 32″x22″ engine, 170 revolutions per minute, installed in an extension built on the north side of the shaft engine house. One 10-ton motor, General Electric, is now operating on the shaft level, and an additional 7½-ton motor will be placed on this level, and two 10-ton and two 7½-ton motors on the slope level, after the work of connecting the slope level tunnel with the shaft has been completed.

A tunnel has been driven from the slope level Holmes to the shaft, total length 1300 feet, about half of which is 16′x7′, the balance being single track, 7′x10′.

A pump house has been built in the rock between the shaft landing and the Little Diamond vein; size of pump house, 56 feet long, 19 feet wide and 15 feet high.

A tunnel has been driven from the Diamond to the Little Diamond vein, 7′x10′ and about 80 feet long. There will be placed in the pump house a compound duplex Worthington pump 42″ and 28″x14″x48″. The purpose of this pump house is to release the two south compartments of the shaft that are now used for hoisting water for the slope level coal, and also to concentrate all the water from Packer No. 1 and No. 5 to this point.

A tunnel has been driven from the Orchard vein to the Diamond vein, 7x10x165 feet.

A 70-ton Bucyrus steam shovel has been placed to strip the Mammoth vein south of Packer No. 1 slope.

Centralia Colliery.—During the year the work of remodeling Centralia breaker was completed. There were placed in the breaker 34 standard Lehigh Valley jigs and a jig engine, size 20″x30″, and three large elevators, size 21′x15′, in addition to the re-location of old machinery and the rebuilding of a portion of the breaker. Inside, a tunnel was driven from the Skidmore to the Seven Foot vein on the first level, near the line of the new tender slope. This tunnel is to open up the Seven Foot vein and to be the first level foot for the tender slope. A tunnel was driven from the Skidmore to the Seven Foot, connecting the first level Logan Seven Foot with the first level Centralia Skidmore vein, for the haulage of Logan coal to Centralia. A new tender slope has been started in the Seven Foot vein. The Gunboat slope was sunk 12 feet, giving sufficient room for pocket in front of the Coxe Stop.

A tunnel has been started across the basin, first level, from the Skidmore vein to the Holmes vein, total distance 350 feet.

A 12-foot fan was built at Logan mine on the north dip, Skidmore vein.

W. R. McTURK COAL COMPANY

Girard-Bear Ridge Colliery.—This colliery was formerly worked by the Philadelphia and Reading Coal and Iron Company. A new modern breaker has been erected with a capacity of 1,000 tons daily. It is equipped with a complete double set of shaking screens for the preparation of the counter or doubtful coal and the roller or pure coal. It has ten jigs of the plunger pattern, with a central slate discharge in front, the coal overflowing on each side; five spiral separators for separating flat coal and slate, and one Emery picker on buckwheat coal. The rough or first cleaning of the coal as it comes from the mines is done in a preparatory cleaner. The coal is dumped on a large shaker with manganese plates, and the slate and rock from broken size and larger are picked out by men and boys. The coal is here separated, the pure coal going to one set of rolls for sizing to Egg and Broken size, and the doubtful or partly bony coal going to a different set for breaking down. These two classes of coal are then carried to the breaker by two separate 30-inch conveyor lines, 220 feet long, and the coal is deposited direct on the breaker screens. The machinery of the breaker is directly driven by endless rope carried over Dodge tension carriages to keep an even stress on the rope. Three sets of bony rolls equipped with manganese steel segments, crush the bony coal thrown out by the spirals and hand pickers, and deliver it by an 18″ conveyor line to a set of link and spindle elevators, 74 feet centers with 24″ buckets, which carry it along with lip screenings and other breakage direct to the top of the breaker to be returned to the screens. The breaker is light and airy throughout, with the interior under observation from many points. A bank coal washer or cleaner has also been erected on the opposite side of the railroad for cleaning the coal from the old banks. The coal from the bank is hoisted on a plane to the top of a building 75 feet in height, and dropped onto shaking screens. This cleaner has a capacity of 500 tons per day.

A new B. and W. boiler of 330 horse power, equipped with a Dutch oven, has been added. This with the boilers already in place gives a boiler capacity of over 1,000 horse power.

Mine Foremen's Examinations

The annual examination of applicants for certificates of qualification as Mine Foremen and Assistant Mine Foremen was held in Union Hall, Pottsville, May 8 and 9. The Board of Examiners was composed of the following members: James A. O'Donnell, Inspector, Centralia; T. E. Snyder, Superintendent, Wilburton; John Carr, miner, Ashland; M. J. Dixson, miner, Locust Dale.

The following persons were recommended for certificates:

Mine Foremen

Thomas Morgan, Peter F. Haley, Jacob Kleman, Ashland.

Assistant Mine Foremen

Harry Lewis, James Taylor, Girardville; John Gough, John F. Clark, Ashland; James Corrigan, Centralia; John V. Gillespie, Wilburton; Henry Shipp, Locust Dale; Nelson Palmer, Arthur Smith, Centralia; Gordon George, Aristes.

Fifteenth District

NORTHUMBERLAND COUNTY

Mt. Carmel, Pa., February 29, 1908.

Hon. James E. Roderick, Chief of Department of Mines:

Sir: I have the honor of transmitting herewith my annual report as Inspector of Mines for the Fifteenth Anthracite District, for the year ending December 31, 1907.

Respectfully submitted,

BENJAMIN I. EVANS,

Inspector.

SUMMARY OF STATISTICS

Number of collieries,	11
Number of mines,	28
Number of mines in operation,	24
Number of tons of coal shipped to market,	2,879,579
Number of tons used at mines for steam and heat,	310,214
Number of tons sold to local trade and used by employes,	41,086
Number of tons produced,	3,230,879
Number of tons produced by compressed air machines,	—
Number of tons produced by electrical machines,	—
Number of persons employed inside of mines,	5,817
Number of persons employed outside,	2,502
Number of fatal accidents inside of mines,	27
Number of fatal accidents outside,	8
Number of non-fatal accidents inside of mines,	15
Number of non-fatal accidents outside,	1
Number of tons of coal produced per fatal accident inside,	119,662
Number of persons employed per fatal accident inside,	215
Number of persons employed per fatal accident outside,	313
Number of persons employed per non-fatal accident inside,	388
Number of persons employed per non-fatal accident outside,	2,502
Number of wives made widows,	20
Number of children orphaned,	44
Number of steam locomotives used outside,	17
Number of compressed air locomotives used inside,	3
Number of electric motors used inside,	7
Number of fans in use,	28
Number of gaseous mines in operation,	12
Number of non-gaseous mines in operation,	12
Number of old mines abandoned,	2

TABLE A

PRODUCTION OF COAL

Names of Operators	Tons
Philadelphia and Reading Coal and Iron Company, ...	1,335,255
Susquehanna Coal Company, ...	1,060,325
Lehigh Valley Coal Company, ...	233,035
Enterprise Coal Company, ...	232,160
Greenough Red Ash Coal Company, ...	224,228
Excelsior Coal Company, ...	134,418
White and White, ...	11,458
Total, ...	3,230,879

Production by Counties

Northumberland, ...	3,230,879

TABLE B.—Fatal and non-fatal accidents inside and outside of mines; number of tons of coal produced per accident; number of persons employed; number employed per accident

Names of Operators	Fatal Accidents			Non-fatal Accidents			Tons of coal produced per fatal accident inside	Tons of coal produced per non-fatal accident inside	Number of employes inside	Number of employes outside	Total number of employes	Number of employes inside per fatal accident	Number of employes outside per fatal accident	Number of employes inside per non-fatal accident	Number of employes outside per non-fatal accident
	Inside	Outside	Total	Inside	Outside	Total									
Philadelphia and Reading Coal and Iron Co.,	16	2	18	10	....	10	83,453	133,525	2,513	926	3,439	157	463	251	....
Susquehanna Coal Co.,	6	5	11	3	....	3	176,721	353,442	1,853	848	2,701	309	170	617	....
Lehigh Valley Coal Co.,	1	....	1	....	1	1	233,035	....	473	199	672	473	....	....	199
Enterprise Coal Co.,	2	1	3	....	....	....	116,080	....	436	242	678	218	242	....	....
Greenough Red Ash Coal Co.,	2	....	2	2	....	2	112,114	....	317	160	477	158	....	158	....
Miscellaneous companies,	....	....	....	....	....	....	....	....	225	127	352	....	....	....	....
Totals and averages for district,	27	8	35	15	1	16	119,662	215,392	5,817	2,502	8,319	215	313	388	2,502

TABLE C.—Classification of Fatal Accidents Inside and Outside of Mines

	Months													
	January	February	March	April	May	June	July	August	September	October	November	December	Totals	Percentages
Causes of Accidents Inside														
Falls of coal,	....	1	....	1	1	....	....	1	....	1	....	...	5	18.52
Falls of slate,	....	1	....	....	1	....	....	2	....	1	2	1	8	29.63
Mine cars,	1	....	....	....	....	....	....	....	1	....	....	...	2	7.41
Explosions of gas and dust,	1	....	....	2	....	1	....	1	....	....	....	....	5	18.52
Suffocation by gas, etc.,	....	....	....	1	....	....	....	....	....	....	....	...	1	3.70
Premature blasts,	....	....	1	....	....	....	....	1	....	....	....	3	5	18.52
Miscellaneous,	....	....	....	....	....	....	1	....	....	....	....	....	1	3.70
Totals,	2	2	1	4	2	1	1	5	1	2	2	4	27	100.00
Causes of Accidents Outside														
Cars,	....	....	....	....	2	....	1	....	....	1	....	....	4	50.00
Machinery,	....	....	1	1	....	....	....	....	....	....	....	1	3	37.50
Miscellaneous,	....	....	1	....	....	....	....	....	....	....	....	....	1	12.50
Totals,	....	....	2	1	2	....	1	....	....	1	....	1	8	100.00
Grand totals inside and outside,..	2	2	3	5	4	1	2	5	1	3	2	5	35	

TABLE D.—Classification of Non-fatal Accidents Inside and Outside of Mines

	Months													
	January	February	March	April	May	June	July	August	September	October	November	December	Totals	Percentages
Causes of Accidents Inside														
Falls of coal,	....	1	1	....	....	....	....	....	....	1	....	....	3	20.00
Falls of slate,	....	....	....	1	1	....	....	....	....	....	....	....	2	13.34
Mine cars,	....	....	1	1	....	1	....	1	1	....	1	....	6	40 00
Miscellaneous,	1	....	1	....	....	....	1	....	....	1	....	....	4	26.66
Totals,	1	1	3	2	1	1	1	1	1	2	1	....	15	100.00
Causes of Accidents Outside														
Machinery,	....	....	....	....	....	....	....	....	....	....	....	1	1	100.00
Totals,	....	....	....	....	....	....	....	....	....	....	....	1	1	100.00
Grand totals inside and outside,..	1	1	3	2	1	1	1	1	1	2	1	1	16	

TABLE E.—Occupations of Persons Killed or Fatally Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Inside													
Miners,	2	2	1	4	2	1	1	4	....	2	1	4	24
Miners' laborers,	....	....	....	....	....	....	....	1	....	....	....	....	1
Company men,	....	....	....	....	....	....	....	....	....	....	1	....	1
All other employes,	....	....	....	....	....	....	....	....	1	....	....	....	1
Totals,	2	2	1	4	2	1	1	5	1	2	2	4	27
Outside													
Engineers and firemen,	....	....	....	1	1	....	....	....	....	1	....	....	3
All other employes,	....	....	2	....	1	....	1	....	....	....	....	1	5
Totals,	....	....	2	1	2	....	1	....	....	1	....	1	8
Grand totals inside and outside,	2	2	3	5	4	1	2	5	1	3	2	5	35

TABLE F.—Occupations of Persons Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Inside													
Miners,	....	1	2	1	1	...	1	....	....	1	....	....	7
Miners' laborers,	....	....	1	....	....	....	....	....	....	....	....	....	1
Drivers and runners,	....	....	....	1	....	....	....	....	1	....	1	....	3
Doorboys and helpers,	....	....	....	....	....	1	....	....	....	....	....	....	1
All other employes,	1	....	....	....	....	....	....	1	....	1	....	....	3
Totals,	1	1	3	2	1	1	1	1	1	2	1	....	15
Outside													
Engineers and firemen,	....	....	....	....	....	....	....	....	....	....	....	1	1
Totals,	....	....	....	....	....	....	....	....	....	....	....	1	1
Grand totals inside and outside,	1	1	3	2	1	1	1	1	1	2	1	1	16

TABLE G.—Nationality of Persons Killed or Fatally Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
American,	....	....	....	2	4	....	1	1	1	2	....	....	11
German,	....	....	....	....	....	1	....	....	....	....	1	....	2
Polish,	1	2	2	3	....	....	....	2	....	...	1	3	14
Hungarian,	....	....	1	....	....	....	....	....	....	....	....	....	1
Slavonian,	1	....	....	....	....	....	....	....	....	....	....	....	1
Lithuanian,	....	....	....	....	....	....	....	....	....	1	....	1	2
Austrian,	....	....	....	....	....	....	....	2	....	....	....	....	2
Greek,	....	....	....	....	....	....	1	....	....	....	....	....	1
Tyrolean,	....	....	....	....	....	....	....	....	....	....	....	1	1
Totals,	2	2	3	5	4	1	2	5	1	3	2	5	35

TABLE H.—Nationality of Persons Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
American,	1	....	1	1	....	....	1	...	1	2	....	1	8
Irish,	....	....	1	....	....	....	....	....	....	....	1	....	2
Polish,	....	1	1	...	1	1	....	....	....	...	....	....	4
Italian,	...	...	...	...	...	...	...	1	....	...	....	....	1
Lithuanian,	....	....	....	1	....	....	....	....	....	....	....	...	1
Totals,	1	1	3	2	1	1	1	1	1	2	1	1	16

TABLE I.—Operators and mines, kind of openings, type and size of fans, size of furnaces, volume of air produced by fan or furnace per minute, number of splits of air currents, and number of persons employed inside

Names of Operators and Mines	Kind of opening	Gaseous or non-gaseous	Method of ventilation	Diameter of fan in feet	Width of blades in feet	Depth of blades in feet	Number of revolutions per minute	Water gauge developed—in inches	Name of fan	Power used	Area of furnace bars in square feet	Number of splits of air currents	Number of cubic feet of air per minute entering the mine at inlet	Total quantity of air per minute circulating in all the splits in cubic feet	Number of persons employed inside
Philadelphia and Reading Coal and Iron Co.															
Locust Gap Colliery:															
Locust Gap, East,	Slope,	Non-gas.	Fan,	21	5	4.6	65	1.1	Guibal,	Steam,	....	4	74,000	54,500	539
Locust Gap, West,	Slope,	Non-gas.	Fan,	12	4	3.6	90	.9			....	3	39,400	29,600	
Locust Spring Colliery:															
Locust Spring, East,	Slope,	Gaseous,	Fan,	15	4	3.6	97	1.6	Guibal,	Steam,	....	5	34,165	24,500	560
Locust Spring,	Shaft,	Gaseous,	Fan,	18	4	3.6	75	1.2			....	5	44,550	34,589	
Locust Spring, West,	Slope,	Gaseous,	Fan,	12	4	3.6	90	.8			....	3	35,000	25,500	
Alaska Colliery:															
Alaska No. 1,	Shaft,	Non-gas.	Fan,	21	4.8	5	100	1.5	Guibal,	Steam,	....	4	99,000	79,500	833
Alaska No. 2,	Shaft,	Non-gas.	Fan,	18	7	6.3	75	1.4			....	4	66,999	57,200	
Reliance Colliery:															
Reliance No. 1,	Slope,	Non-gas.	Fan,	15	5	5	75	1	Guibal,	Steam,	....	4	51,000	41,500	581
Reliance No. 2,	Slope,	Non-gas.	Fan,	18	5.6	5.6	70	1.25			....	8	71,600	62,000	
Susquehanna Coal Co.															
Pennsylvania Colliery:															
Pennsylvania No. 1,	Slope,	Gaseous.	Fan,	18	3.5	3.5	60	1.6	Vulcan,	Steam,	....	3	120,300	100,600	750
Pennsylvania No. 4,				18	4.5	4.1	75	1.6	Mullen,		....	4	83,865	66,900	
Pennsylvania No. 5,				18	6.3	5.9	75	1.3	Mullen,		....	4	36,000	26,400	

Richards Colliery:															
Richards, N. D., ...	Slope,....	Gaseous,...	Fan,.....	18	7.2	5.2	85	1.6	Vulcan, ...	Steam,....	....	5	74,000	64,500	838
Richards, S. D., ...	Slope,....	Gaseous,...	Fan,.....	19	6.8	6.4	78	1.7	Mullen, ...		...	6	94,063	84,500	
Richards No. 4, ...	Slope,....	Non-gas ...	Fan,.....	16	4.5	4.5	108	2	Mullen, ...		....	4	22,000	12,300	
Richards No. 5, ...	Slope,....	Non-gas....	Fan,.....	12	4.5	2	102	2	Sturdevant, ...		....	4	21,500	21,570	
Scott Colliery:															
Scott	Shaft,....	Gaseous,...	Fan,.....	18	5	5	85	1.7	Mullen,...........	Steam,.......	...	5	71,700	61,900	292
Lehigh Valley Coal Co.															
Sayre Colliery:															
Sayre, ...	Shaft,..	Gaseous,...	Fan,...	18	4.6	5	90	1	Guibal, ...	Steam,....	....	3	39,400	29,500	176
Sioux No. 1, ...	Slope,..			16	6	5	90	.5			....	2	41,400	31,800	141
Sioux No. 3, ...	Slope,..			16	5	5	70	1			...	8	62,200	52,400	156
Enterprise Coal Co.															
Enterprise Colliery:															
Enterprise No. 3, ...	Slope,..	Non-gas.,..	Fan,...	14	3.5	5	90	1.6	Guibal, ...	Steam,....	....	4	40,000	30,500	436
Enterprise No. 10, ...	Slope,..			14	3.5	5	90	1			....	4	40,300	30,500	
Enterprise, ...	Shaft,..			16	4.5	5	93	1.8			...	3	50,000	40,300	
Greenough Red Ash Coal Co.															
Greenough Colliery:															
Greenough No. 1, ...	Shaft,..	Non-gas.,..	Fan,...	15	5	4	100	2.1	Mullen, ...	Steam,....	....	5	55,000	45,100	317
Greenough No. 2, ...	Shaft,..			12	4	4	80	1			....	3	21,200	11,400	
Greenough No. 3, ...	Slope...			12	4	4	52	.6			...	2	15,000	10,100	
Excelsior Coal Co.															
Excelsior, ...	Drift,....	Non-gas.,..	Fan,.....	21	5	5	72	1	Beadle, ...	Steam,.......	....	3	41,300	31,500	182
White and White															
Columbus No. 2, ...	Drift,....	Non-gas,...	Fan,.....	14	3.8	5	75	1.2	Guibal, ...	Steam,.......	...	3	10,500	8,700	43

TABLE 1.—Operators, location of collieries, railroads, etc.

Names of Operators and Collieries	County	Name of General Superintendent	Post Office	Name of Superintendent	Post Office	Railroad to Mine
Philadelphia and Reading Coal and Iron Co.						
Locust Gap, Locust Spring, Alaska, Reliance,	Northumberland,	William J. Richards,	Pottsville,	Reese Tasker,	Pottsville,	P. and R.
Susquehanna Coal Co.						
Pennsylvania, Richards, Scott,	Northumberland,	Robert A. Quin,	Wilkes-Barre,	William Reinhardt,	Shamokin,	Pennsylvania
Lehigh Valley Coal Co.						
Sayre,	Northumberland,	S. D. Warriner,	Wilkes-Barre,	J. M. Humphrey,	Centralia,	Lehigh Valley
Enterprise Coal Co.						
Enterprise,	Northumberland,	William L. Connell,	Scranton,			P. and R.
Greenough Red Ash						
Greenough,	Northumberland,	Edward Brennan,	Shamokin,			Pennsylvania
Excelsior Coal Co.						
Excelsior,	Northumberland	Andrew Robertson,	Pottsville,	A. D. Robertson,	Shamokin,	P. and R.
White and White						
Columbus No. 2,	Northumberland,	E. E. White,	Mt. Carmel,	Alfred White,	Mt. Carmel,	Lehigh Valley

TABLE 2.—Number of tons of coal mined, number of days worked, number of persons employed, number killed and injured, quantity of powder and dynamite used, etc.

Names of Operators and Collieries	County	Number of tons of coal shipped to market	Number of tons used at collieries for steam and heat	Number of tons sold to local trade and used by employes	Total production of coal in tons	Number of days worked	Number of employes	Number of fatal accidents	Number of non-fatal accidents	Number of kegs of powder used	Number of pounds of dynamite used	Number of horses and mules
Philadelphia and Reading Coal and Iron Co.												
Locust Gap,	Northumberland,	580,622	13,653	3,171	651,836	279	539	1	4	5,469	59,891	43
Locust Spring,		....	54,390	....	....	.....	1,006	6	2	4,481	94,393	85
Alaska,		354,927	39,529	214	394,670	277	1,058	6	1	9,581	93,375	81
Reliance,		239,588	29,038	20,123	288,749	277	836	5	3	4,885	136,118	78
Totals,	....	1,175,137	136,610	23,508	1,335,255	......	3,439	18	10	24,416	383,777	287
Susquehanna Coal Co.												
Pennsylvania,	Northumberland,	420,437	27,880	7,887	456,234	264	1,078	5	1	11,532	43,592	117
Richards,		386,429	31,500	84	418,013	269	1,186	4	2	5,406	186,089	114
Scott,		165,368	20,600	110	186,078	218	437	2	.....	3,137	46,033	25
Totals,	....	972,264	79,980	8,081	1,060,325	......	2,701	11	3	20,075	275,714	256
Lehigh Valley Coal Co.												
Sayre,	Northumberland,	196,933	35,749	353	233,035	239	672	1	1	3,906	75,416	55
Enterprise Coal Co.												
Enterprise,	Northumberland,	201,912	30,000	248	232,160	252	678	3	.....	8,954	12,704	55
Greenough Red Ash Coal Co.												
Greenough,	Northumberland,	205,399	16,000	2,829	224,228	287	477	2	2	5,021	15,509	52

TABLE 2.—Continued

Names of Operators and Collieries	County	Number of tons of coal shipped to market	Number of tons used at collieries for steam and heat	Number of tons sold to local trade and used by employes	Total production of coal in tons	Number of days worked	Number of employes	Number of fatal accidents	Number of non-fatal accidents	Number of kegs of powder used	Number of pounds of dynamite used	Number of horses and mules
Excelsior Coal Co. Excelsior,	Northumberland,...	124,937	9,075	406	134,418	246	292	.....	.....	3,440	6,600	43
White and White Columbus No. 2,	Northumberland,...	2,997	2,800	5,661	11,458	132	60	.....	.....	700	500	6
Grand totals,	....	2,879,579	310,214	41,086	3,230,879	.....	8,319	35	16	66,512	770,220	754

TABLE 2.—PART 2

Names of Operators	County	Number of Boilers					Locomotives			Number of steam engines of all classes	Total horse power	Number of pumps delivering water to surface	Capacity in gallons per minute	Quantity delivered to surface per minute—gallons	Number of electric dynamos	Number of air compressors
		Cylindrical	Horse power	Tubular	Horse power	Total horse power	Steam	Air	Electric							
Philadelphia and Reading Coal and Iron Co.,	Northumberland,	......	....	52	7,920	7,920	5	3	.....	78	12,629	18	14,820	10,800	.....	9
Susquehanna Coal Co.,		......	....	46	6,000	6,000	7	.....	.....	55	7,100	16	11,400	3,560	.....	3
Lehigh Valley Coal Co.,		......	....	11	2,900	2,900	4	.....	3	39	2,525	7	10,100	8,007	1	1
Enterprise Coal Co.,		......	....	10	2,500	2,500	.....	.....	4	12	1,287	2	3,274	3,274	2	2
Greenough Red Ash Coal Co.,		......	....	5	850	850	.....	.....	.....	12	600	2	1,000	1,000	1	.....
Excelsior Coal Co.,		18	540	....	....	540	1	.....	.....	7	241	1	600	400	.....	.....
White and White,		4	100	....	....	100	.....	.....	.....	10	180	....	....	....	.....	.....
Totals,	....	22	640	124	20,170	20,810	17	3	7	213	24,562	46	41,194	27,041	4	15

TABLE 3.—Number of each class of employes inside and outside of mines

Names of Operators and Collieries	County	Inside											Outside									Grand totals inside and outside
		Mine foremen	Assistant mine foremen	Fire bosses and assistants	Miners	Miners' laborers	Drivers and runners	Doorboys and helpers	Pumpmen	Company men	All other employes	Total inside	Superintendents	Foremen	Blacksmiths and carpenters	Engineers and firemen	Slate pickers (boys)	Slate pickers (men)	Bookkeepers and clerks	All other employes	Total outside	
Philadelphia and Reading Coal and Iron Co.																						
Locust Gap,	Northumberland,	2	....	6	299	27	26	3	2	49	125	539	....	....	....	....	....	....	....	.....	.....	539
Locust Spring,	Northumberland,	1	1	8	255	30	39	11	2	77	136	560	....	3	16	56	46	16	4	305	446	1,006
Alaska,	Northumberland,	1	1	6	462	112	75	25	5	44	102	833	....	2	9	29	45	11	4	125	225	1,058
Reliance,	Northumberland,	1	....	6	340	51	29	5	4	40	105	581	....	2	8	20	85	4	2	134	255	836
Totals,		5	2	26	1,356	220	169	44	13	210	468	2,513	....	7	33	105	176	31	10	564	926	3,439
Susquehanna Coal Co.																						
Pennsylvania,	Northumberland,	1	4	11	340	128	57	9	12	157	31	750	....	1	27	39	81	15	6	159	328	1,078
Richards,	Northumberland,	2	4	11	347	125	58	22	10	151	81	811	1	1	24	47	111	19	5	167	375	1,186
Scott,	Northumberland,	1	1	4	149	50	12	1	3	60	11	292	....	1	7	18	53	9	5	52	145	437
Totals,		4	9	26	836	303	127	32	25	368	123	1,853	1	3	58	104	245	43	16	378	848	2,701
Lehigh Valley Coal Co.																						
Sayre,	Northumberland,	2	9	...	232	66	20	8	10	......	126	473	1	4	23	33	20	3	3	112	199	672
Enterprise Coal Co.																						
Enterprise,	Northumberland,	2	...	....	231	74	35	4	5	75	10	436	1	2	13	36	60	10	2	118	242	678
Greenough Red Ash Coal Co.																						
Greenough,	Northumberland,	1	1	3	137	56	39	2	4	26	48	317	1	1	8	13	82	2	3	50	160	477

Excelsior,	Excelsior Coal Co.	Northumberland,	1	2	...	72	60	18	3	1	14	11	182	1	1	7	11	22	14	2	52	110	292
Columbus No. 2,	White and White	Northumberland,	1	1	...	18	5	5	......	......	2	11	43	1	1	1	2	5	....	1	6	17	60
Grand totals,			16	24	55	2,882	784	413	93	58	695	797	5,817	6	19	143	304	610	103	37	1,280	2,502	8,319

TABLE 3.— PART 2

Names of Operators and Collieries	County	Number of Days Worked in Breaker												
		January	February	March	April	May	June	July	August	September	October	November	December	Total
Philadelphia and Reading Coal and Iron Co.														
Locust Gap,	Northumberland,	24	21	18	24	24	24	24	23	24	26	24	23	279
Locust Spring,		....	....	....	....	....	....	....	....	....	....	....	....	....
Alaska,		24	24	20	20	24	25	22	24	22	26	23	23	277
Reliance,		26	24	20	18	24	25	22	24	22	26	23	23	277
Susquehanna Coal Co.														
Pennsylvania,	Northumberland,	22	19	20	21	23	23	24	23	23	23	20	23	264
Richards,		23	21	20	23	22	23	24	24	23	23	22	21	269
Scott,		20	15	19	18	19	18	18	19	18	17	18	19	218
Lehigh Valley Coal Co.														
Sayre,	Northumberland,.	....	11	22	25	22	22	24	22	19	25	23	24	239
Enterprise Coal Co.														
Enterprise,	Northumberland,.	24	18	17	20	24	24	23	20	20	22	20	20	252
Greenough Red Ash Coal Co.														
Greenough,	Northumberland,.	25	22	24	25	24	24	25	24	22	25	23	24	287
Excelsior Coal Co.														
Excelsior,	Northumberland,.	23	20	17	22	21	23	21	20	20	23	18	18	246
White and White														
Columbus No. 2,	Northumberland..	15	13	10	3	4	3	3	7	18	20	19	17	132

TABLE 4.—Fatal accidents inside and outside of mines

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Number of widows	Number of orphans	Name of Mine	County	Nature and Cause of Accident in Brief
Jan.	10	Frank Marchinsko,....	Polish,.......	Miner, ...	40	S.	....	....	Locust Spring,.	Northumberland,	Fatally injured while lighting a shot with a match. A fall of top coal drove the gas down on the naked light, causing an explosion. He should have tested for gas with safety lamp before lighting the shot.
Feb.	16	Florence Wycofski, ...	Polish,.......	Miner, ...	26	S.	....	....	Alaska, ...		Fatally injured while working at face of pillar. A slip of coal fell out of the face on top of him, injuring him so severely that he died on the 19th.
	27	Domnick Broncofski,..	Polish,.......	Miner, ...	38	M.	1	....	Enterprise, ...		Fatally injured by fall of slate. He had fired a shot that discharged a prop at face, and when he returned to the face a piece of slate fell on him, injuring his back and leg so severely that he died March 2.
April	4	John Purzinski, ...	Polish,.......	Miner, ...	36	M.	1	....	Alaska, ...		Killed by fall of coal. He was taking out a pillar and left the top coal up, and while putting sheet iron under the top coal it fell on him.
May	13	William Weary, ...	American,...	Miner, ...	38	M.	1	2	Locust Gap, ..		Killed by fall of top coal. While drilling hole at face of breast, under top coal, which he knew was loose, it fell on him.
	22	Howard Fertig, ...	American,...	Miner, ...	38	M.	1	5	Sioux No. 3, ..		Killed instantly by fall of slate. He had fired a shot at face of return airway, and after returning to work, a piece of slate fell on him.
Aug.	10	Alex. Latshaw, ...	American,...	Miner, ...	49	S.	....	....	Richards No. 4,		Fatally injured by fall of coal while putting up a set of timber at the corner of a heading.
	26	Stancy Sambuski, ...	Polish,.......	Miner, ...	50	M.	1	5	Greenough, ...		Killed instantly by fall of top slate. He had fired a shot off a rib in a flat breast, and while elevating the road a piece of top slate fell on him. He had neglected to timber his place.

TABLE 4.— Continued

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Number of widows	Number of orphans	Name of Mine	County	Nature and Cause of Accident in Brief
Aug.	26	Frank Tefcuski,	Polish,	Laborer,	40	M.	1	2	Greenough,	Northumberland,	Killed by fall of top slate. The same fall that killed Sambuski.
Oct.	15	Henry Becker,	American,	Miner,	43	M.	1	7	Reliance,		Killed instantly by fall of slate. He was robbing pillars and while going up along side of pillar, the slate fell on him.
	24	Joseph Volenta,	Lithuanian,	Miner,	27	S.	....	....	Reliance,		Killed instantly by fall of coal. He was robbing pillars and after firing a shot he went back to dress shot off, and while doing so, the coal fell on him. This pillar had been stopped, owing to a slight squeeze, but he was allowed to load his loose coal.
Nov.	6	Enock Ososky,	Polish,	Miner,	33	S.	....	....	Alaska,		Killed instantly by fall of slate. He had neglected to timber his working place, and after firing a shot went back to dress it off, and while doing so a piece of slate fell on him.
	21	Fred Kesler,	German,	Repairman,	36	M.	1	2	Locust Spring,		Fatally injured by fall of rock. Two miners were taking down slate from behind the frame of a door, when Kesler came along and in a joking manner struck the frame of the door with a bar. A piece of rock from behind the frame slid down on him and injured him so severely that he died on the 23rd.
Dec.	9	Larry Brantz,	Tyrclean,	Miner,	40	M.	1	....	Locust Spring,		Killed instantly by fall of top slate while working at face of gangway.
Jan.	30	Steve Stebben,	Slavonian,	Miner,	26	M.	1	1	Alaska,		Killed instantly by cars. While walking on the track to his work from the bottom of the shaft, he saw a trip coming and stepped aside. Thinking that it had passed, he stepped on the track again, when the second part of the trip, which had become uncoupled, struck him.

May	14	Wally Reinhardt, ...	American,...	Mining engineer,	23	S.	....	....	Richards, ...	Northumberland,	Killed instantly by cars. He was riding on one of two trucks loaded with car wheels and tried to catch a wheel on the front truck that was about to fall off. He was thrown off on his head and the truck ran over him. Outside.
	29	George Klese, ...	American,...	Top-man, ..	18	S.	....	....	Locust Spring,.		Fatally injured by cars. He was on front end of a loaded trip of cars to uncouple the rope, when the cars ran off the track and threw him under the trip. The landing was too short for four cars, the regular trip being three cars. He died June 8. Outside.
July	24	Mago Wally, ...	Greek,.......	Laborer, ...	29	S.	....	....	Alaska, ...		Instantly killed by cars. While running a railroad box-car out from under the breaker, he fell off on to the rail and the car ran over him. Outside.
Sept.	23	James McLaughlin,....	American,...	Bottom man,	22	S.	....	....	Alaska, ...		Killed instantly by cars. The top man had failed to put the pin through both holes of the clevis and when the car got over the knuckle the clevis spread, the car unhitched, ran down the slope, and caught McLaughlin at the first lift on the main track of the slope, and killed him.
Oct.	16	James Shaffer, ...	American,...	Engineer, ..	55	M.	1	....	Richards, ...		Shaffer, on engine No. 2, went up with a trip to No. 4 mine. Before going he told the engineer of No. 11 engine that he would wait at No. 4 mine until No. 11 came up. Engine No. 11 broke down half way to No. 4 mine, going up with an empty trip. The engineer then left the empty trip on a siding and took his engine No. 11 back to where he started from to be repaired. The conductor then went to the 'phone in the office and called Shaffer at No. 4 mine and told him to bring down the trip, as his engine had broken down and could not come up again that day. The foreman then came along and told the engineer of No. 3 engine to make the trip instead of No. 11, which he did, and ran into engine No. 2 coming down from No. 4 mine, and killed Shaffer. Outside.
March	2	Theodore Slavinski,...	Polish,.......	Miner, ...	40	M.	1	5	Pennsylvania,..		Killed by flying coal from blast. He shortened the squib, put it in the hole, and lit it with his naked lamp. The shot went off before he reached a place of safety.
Aug.	10	George Battanic, ...	Austrian,....	Miner, ...	32	S.	....	....	Reliance, ...		Killed by blast. He did not give the squib time to explode, and while going back the shot went off and killed him.

TABLE 4.—Continued

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Number of widows	Number of orphans	Name of Mine	County	Nature and Cause of Accident in Brief
Dec.	9	Staney Philipouskie,...	Polish,.......	Miner, ...	30	M.	1	....	Enterprise, ...	Northumberland,	Instantly killed by blast. While lighting a squib with his naked lamp the flame caught the powder in his squib and the shot went off and killed him.
	13	Martin Martincavage,.	Polish,.......	Miner, ...	30	S.	....	....	Scott, ...		Instantly killed by blast. He shortened the squib and the shot went off before he had time to escape.
	23	Thomas Lurovich, ...	Lithuanian,.	Miner, ...	40	M.	1	2	Pennsylvania,..		Killed by blast. After lighting the shot, he reached a place of safety, but did not give the shot time enough to go off. As he was returning to the face of the breast the shot went off.
April	8	Thomas Durkin, ...	American,...	Miner, ...	54	M.	1	....	Locust Spring		Killed by explosion of gas. After the fire boss told them their place was safe they went in and Durkin went up the pillar manway from the gangway with a naked light on his head and encountered a body of gas, which exploded, killing him and Shipley. Safety lamps were used exclusively in this part of the mine, and why Durkin went up with a naked light on his head is not known. An inquest was held on the death of these men and testimony was produced to show that the fire boss had been to their working place and that after he had left a fall of coal occurred in the return airway, which obstructed the ventilation and caused the gas to accumulate.
	8	Joseph Shipley, ...	Polish,.......	Miner, ...	45	M.	1	6			
	20	Vetro Bedas, ...	Polish,.......	Miner, ...	26	M.	1	....	Scott, ...		Smothered by gas. He went up into his breast and tried to cross the face of it, which was full of gas, and was smothered. He had been warned by the fire boss to remain at the station until the place was reported safe.

July	17	Samuel Platt,	American,	Miner,	39	M.	1	5	Reliance,	Northumberland,	Killed by a rush of water. While driving up a manway they broke through to an old gangway above, and a rush of water occurred that swept Platt down the manway. A hole 11 feet long had been drilled ahead and had tapped this water on the 12th. They did not work again until the 17th, during which time the hole had blocked, preventing the water from coming through. The fire boss, knowing this, told them to put the drill up the hole and open it, which they neglected to do. Hence the accident.
March	5	Lewis Dowie,	Hungarian,	Laborer,	35	S.	....	....	Richards,		Killed by being struck with flying debris, caused by the explosion of a powder magazine. Outside.
June	17	Christ Besgem,	German,	Miner,	53	M.	1	....	Reliance,		Killed by explosion of gas. He was sitting down in the stump heading when a body of gas from the breast inside came on his light. An explosion followed, burning him so badly that he died on the 20th. The miners in the breast inside had neglected to fix their canvas that was turning the air up in the breast when the gas came down from a shot. An hour afterwards they were going back to their work and found the canvas open, and without warning the men outside they closed it and turned the air up their breast, which in turn drove the gas that had accumulated in the breast down on Besgem.
Aug.	1	Reko Moser,	Austrian,	Miner,	38	M.	1	2	Pennsylvania,		Fatally burned by gas. After putting coal down his breast manway and obstructing the ventilation, he lit a shot and fired the gas, and was burned so badly that he died shortly afterwards.
March	3	John Longoski,	Polish,	Chute Boss,	18	S.	....	....	Pennsylvania,		Killed by machinery. While putting a rope on a pulley wheel the machinery started and caught him between the pulley and frame dragging him between the spokes of the wheel. Outside.
April	4	James Williams,	American,	Engineer,	26	M.	1	....	Pennsylvania,		Killed by machinery. While cleaning his engine, which he had stopped, another employe from the breaker came in to the engine house and started the engine and caught him in the fly wheel, killing him instantly. Outside.
Dec.	2	Anthony Poposhinski,	Polish,	Oiler,	17	S.	....	....	Enterprise,		Killed by machinery. While oiling the screen cogs he went inside the railing and slipped into the cogs and was killed. He should have first stopped the machinery. Outside.

TABLE 5.—Non-fatal accidents inside and outside of mines

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Name of Mine	County	Nature and Cause of Accident in Brief
Jan.	25	Edward McDonnel,	American,	Loader,	24	S.	Reliance,	Northumberland,	Leg broken by falling while getting off the accommodation truck.
Feb.	9	Anthony Shatskie,	Polish,	Miner,	33	M.	Richards,		Left leg broken by fall of coal.
March	9	Dennis Bradley,	American,	Laborer,	28	S.	Locust Gap,		Both jaws broken by being caught between car and prop on upper side of gangway.
	25	Edward Cannon,	Irish,	Miner,	40	M.	Greenough,		Arm broken by a piece of coal rolling down the chute and striking him.
	26	Anthony Bronskie,	Polish,	Miner,	39	M.	Pennsylvania,		Toes severed by piece of coal falling on his foot.
April	15	Peter Godoskie,	Lithuanian,	Miner,	45	M.	Locust Gap,		Leg smashed, necessitating amputation, by fall of slate.
	18	Christ McGinn,	American,	Driver,	18	S.	Locust Spring,		Leg cut off between empty car and loaded trip.
May	25	Charles Melofski,	Polish,	Miner,	48	M.	Alaska,		Leg broken by fall of slate at breast.
June	26	Anthony Bedganovitch,	Polish,	Trapper,	17	S.	Richards,		Injured internally while riding on the side of an empty trip. He was caught between the car and low side leg.
July	17	John Platt,	American,	Miner,	35	M.	Reliance,		Severely injured by being knocked down a manway by a rush of water.
Aug.	16	Ralph Andrack,	Italian,	Loader,	26	M.	Locust Gap,		Back broken while trying to couple cars in motion. He fell between them.
Sept.	25	George Williams,	American,	Driver,	24	S.	Greenough,		Leg broken and otherwise injured by car on slope. He was following a car up the slope and the rope broke, and the car ran back and struck him.
Oct.	6	Henry Weikel,	American,	Oiler,	18	S.	Locust Spring,		Arm broken between the rope and groove of a sheave wheel.
	14	Edward Smith,	American,	Miner,	51	M.	Reliance,		Skull fractured by a fall of coal.
Nov.	1	Peter Rafferty,	Irish,	Driver,	28	S.	Locust Gap,		Foot smashed. Caught in the tongues and trip ran over it.
Dec.	1	Mike Purcell,	American,	Engineer,	38	M.	Sayre,		Spinal column injured. Struck by the connecting rod of engine. Outside.

CONDITION OF COLLIERIES

PHILADELPHIA AND READING COAL AND IRON COMPANY

Locust Gap East.—Ventilation fair, drainage good. Road beds in fair condition.

Locust Gap West.—Ventilation fair, drainage good. Road beds in fair condition.

Locust Spring West.—Ventilation and drainage good. Road beds in fair condition.

Locust Spring No. 1 Slope.—Ventilation and drainage good. Road beds in good condition.

Locust Spring Shaft.—Ventilation, drainage and road beds in good condition.

Alaska.—Ventilation fair, drainage good. Road beds in fair condition .

Reliance Colliery.—Ventilation fair, drainage good. Road beds in fair condition.

SUSQUEHANNA COAL COMPANY

Pennsylvania Colliery, No. 1 Slope.—Ventilation, drainage and road beds in good condition.

Pennsylvania Colliery, No. 4 Slope.—Ventilation and drainage good. Road beds in fair condition.

Pennsylvania Colliery, No. 5 Slope.—Ventilation and drainage good. Road beds in fair condition.

Richards Colliery.—Ventilation fair, drainage good. Road beds in bad condition.

Richards No. 4 Slope.—Ventilation, drainage and road beds in fair condition.

Richards No. 5 Slope.—Ventilation and drainage good. Road beds in fair condition.

Scott Colliery.—Ventilation and drainage good. Road beds in fair condition.

ENTERPRISE COAL COMPANY

Enterprise Colliery.—Ventilation fair, drainage good. Road beds not very well kept.

GREENOUGH RED ASH COAL COMPANY

Greenough Colliery.—Ventilation and drainage good. Road beds in fair condition,

LEHIGH VALLEY COAL COMPANY

Sayre Colliery.—Ventilation fair, drainage good. Road beds in fair condition.

No. 1 Sioux.—Ventilation fair, drainage good. Road beds in poor condition.

No. 3 Sioux.—Ventilation, drainage and road beds in fair condition.

EXCELSIOR COAL COMPANY

Excelsior Colliery.—Ventilation, drainage and road beds in fair condition.

WHITE AND WHITE

Columbus No. 2.—Ventilation, drainage and road beds in fair condition.

Mine Foremen's Examinations

The annual examination of applicants for certificates of qualification as Mine Foremen and Assistant Mine Foremen was held at Pottsville and Mt. Carmel, April 6 and 13. The Board of Examiners was composed of the following members: B. I. Evans, Inspector, Mt. Carmel; A. Robertson, Jacob Fleming and James Bache.

The following persons were recommended for certificates:

Assistant Mine Foremen

James Roberts, Mt. Carmel; Nicholas Murray, Mt. Carmel; James E. Brennan, Mt. Carmel; Patrick J. Johnson, Mt. Carmel.

Sixteenth District

NORTHUMBERLAND COUNTY

Shamokin, Pa., March 5, 1908.

Hon. James E. Roderick, Chief of Department of Mines:

Sir: I have the honor of transmitting herewith my annual report as Inspector of Mines for the Sixteenth Anthracite District, for the year ending December 31, 1907.

Respectfully submitted,

M. McLAUGHLIN,

Inspector.

SUMMARY OF STATISTICS

Number of collieries	13
Number of mines,	38
Number of mines in operation,	38
Number of tons of coal shipped to market,	2,364,974
Number of tons used at mines for steam and heat,	286,538
Number of tons sold to local trade and used by employes,	68,852
Number of tons produced,	2,720,364
Number of tons produced by compressed air machines,	—
Number of tons produced by electrical machines,	—
Number of persons employed inside of mines,	4,836
Number of persons employed outside,	2,554
Number of fatal accidents inside of mines.	18
Number of fatal accidents outside,	2
Number of non-fatal accidents inside of mines,	61
Number of non-fatal accidents outside,	9
Number of tons of coal produced per fatal accident inside,	151,131
Number of persons employed per fatal accident inside,	269
Number of persons employed per fatal accident outside,	1,277
Number of persons employed per non-fatal accident inside,	79
Number of persons employed per non-fatal accident outside,	284
Number of wives made widows,	14
Number of children orphaned,	40
Number of steam locomotives used outside,	19
Number of electric motors used inside ,	3
Number of fans in use,	37
Number of gaseous mines in operation,	22
Number of non-gaseous mines in operation,	16
Number of new mines opened,	3
Number of old mines abandoned,	8
Number of old mines reopened,	1

TABLE A

PRODUCTION OF COAL

Names of Operators	Tons
Philadelphia and Reading Coal and Iron Company, ...	1,408,681
Mineral Railroad and Mining Company, ...	619,722
Susquehanna Coal Company, ...	338,273
Buck Ridge Coal Company, ...	151,765
Shipman Koal Company, ...	93,202
Excelsior Coal Company, ...	88,376
Llewellyn Mining Company, ...	19,319
Trevorton Coal Land Company, ...	1,026
Total, ...	2,720,364

Production by Counties

Northumberland, ...	2,720,364

TABLE B.—Fatal and non-fatal accidents inside and outside of mines; number of tons of coal produced per accident; number of persons employed; number employed per accident

Names of Operators	Fatal Accidents			Non-fatal Accidents			Tons of coal produced per fatal accident inside	Tons of coal produced per non-fatal accident inside	Number of employes inside	Number of employes outside	Total number of employes	Number of employes inside per fatal accident	Number of employes outside per fatal accident	Number of employes inside per non-fatal accident	Number of employes outside per non-fatal accident
	Inside	Outside	Total	Inside	Outside	Total									
Philadelphia and Reading Coal and Iron Co.,	6	2	8	33	2	35	234,780	42,687	2,281	1,053	3,334	380	527	69	527
Mineral Railroad and Mining Co.,	6	....	6	9	....	9	103,287	68,858	1,231	575	1,806	205	....	137	....
Susquehanna Coal Co.,	4	....	4	14	5	19	84,568	24,162	746	472	1,218	187	....	53	94
Buck Ridge Coal Co.,	....	....	....	3	1	4	....	50,588	174	108	282	....	....	58	108
Excelsior Coal Co.,	2	....	2	....	....	....	44,188	....	187	75	262	94	....	....	....
Llewellyn Mining Co.,	....	....	....	2	1	3	....	3,660	88	92	180	....	....	44	92
Miscellaneous companies,	....	....	....	....	....	....	....	....	129	179	308	....	....	....	....
Totals and averages for district,	18	2	20	61	9	70	151,131	44,596	4,836	2,554	7,390	269	1,277	79	284

TABLE C.—Classification of Fatal Accidents Inside and Outside of Mines

	Months													
	January	February	March	April	May	June	July	August	September	October	November	December	Totals	Percentages
Causes of Accidents Inside														
Falls of coal,	....	....	....	....	1	....	....	....	....	2	1	....	4	22.22
Falls of slate,	2	1	....	....	....	....	....	....	2	....	....	....	5	27.78
Falls of roof,	....	....	....	....	....	....	....	....	1	....	....	....	1	5.56
Mine cars,	....	....	....	....	....	....	....	....	1	....	1	....	2	11.11
Explosions of powder and dynamite,	....	....	....	....	....	....	....	....	1	....	....	....	1	5.56
Premature blasts,	....	....	....	....	....	....	....	1	....	1	....	....	2	11.11
Falling into slopes, etc.,	....	....	....	....	....	....	2	....	....	....	....	....	2	11.11
Miscellaneous,	....	...	1	....	....	....	....	....	....	....	...	....	1	5.55
Totals,	2	1	1	....	1	....	2	1	5	3	2	....	18	100.00
Causes of Accidents Outside														
Cars,	....	....	....	....	....	....	....	....	....	1	....	....	1	50.00
Miscellaneous,	....	....	....	....	....	....	....	1	....	....	....	....	1	50.00
Totals,	...	...	...	...	...	...	...	1	...	1	...	...	2	100.00
Grand totals inside and outside,	2	1	1	....	1	....	2	2	5	4	2	....	20	

TABLE D.—Classification of Non-fatal Accidents Inside and Outside of Mines

	Months													
	January	February	March	April	May	June	July	August	September	October	November	December	Totals	Percentages
Causes of Accidents Inside														
Falls of coal,	5	1	....	1	....	....	1	....	1	....	1	....	10	16.39
Falls of slate,	1	....	1	3	1	....	3	1	....	....	....	....	10	16.39
Falls of roof,	....	....	....	....	....	....	3	1	....	....	....	....	4	6.56
Mine cars,	1	....	....	2	1	2	....	1	....	....	1	....	8	13.12
Explosions of gas and dust,	....	....	....	....	....	4	...	1	....	2	....	3	10	16.39
Explosions of powder and dynamite,	2	....	....	....	....	....	....	....	....	....	....	2	4	6.56
Premature blasts,	....	....	....	....	....	1	....	....	....	....	1	1	3	4.92
Falling into slopes, etc.,	....	....	....	....	....	1	....	....	....	....	....	....	1	1.64
Machinery,	....	1	....	....	....	1	....	....	....	....	....	....	2	3.28
Miscellaneous,	1	....	....	....	2	1	1	....	....	1	2	1	9	14.75
Totals,	10	2	1	6	4	10	8	4	1	3	5	7	61	100.00
Causes of Accidents Outside														
Cars,	....	1	1	....	....	....	....	....	1	....	....	....	3	33.33
Machinery,	....	1	....	....	1	....	....	....	1	....	....	....	3	33.33
Miscellaneous,	....	....	....	1	....	....	2	....	....	....	....	....	3	33.31
Totals,	....	2	1	1	1	....	2	....	2	....	....	....	9	100.00
Grand totals inside and outside,	10	4	2	7	5	10	10	4	3	3	5	7	70	

TABLE E.–Occupations of Persons Killed or Fatally Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Inside													
Miners,	2	...	....	...	1	...	2	1	2	3	2	....	13
Miners' laborers,	...	1	....	...	....	...	...	....	2	....	....	....	3
Drivers and runners,	...	...	....	....	....	...	....	....	1	....	....	....	1
Company men,	....	....	1	....	....	....	....	....	....	....	....	....	1
Totals,	2	1	1	...	1	...	2	1	5	3	2	....	18
Outside													
All other employes,	...	...	....	...	....	...	....	1	....	1	...	....	2
Totals,	...	...	....	...	....	...	....	1	...	1	...	....	2
Grand totals inside and outside,	2	1	1	...	1	...	2	2	5	4	2	...	20

TABLE F.—Occupations of Persons Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Inside													
Assistant mine foremen,	...	...	....	...	....	...	....	1	....	....	...	....	1
Fire bosses and assistants,	....	...	....	...	....	2	...	....	....	....	...	....	2
Miners,	8	1	1	4	1	4	5	2	....	3	3	6	38
Miners' laborers,	2	1	....	....	2	2	3	1	1	....	1	....	13
Drivers and runners,	....	....	....	2	....	....	....	....	....	....	1	....	3
Pumpmen,	....	....	....	....	1	...	....	....	...	....	...	....	1
All other employes,	....	....	....	....	....	2	....	....	....	....	...	1	3
Totals,	10	2	1	6	4	10	8	4	1	3	5	7	61
Outside													
Blacksmiths and carpenters,	...	...	....	....	....	....	1	....	....	....	...	....	1
Engineers and firemen,	....	2	....	....	....	....	....	....	1	....	....	....	3
All other employes,	....	....	1	1	1	....	1	....	1	....	....	....	5
Totals,	....	2	1	1	1	....	2	....	2	....	....	....	9
Grand totals inside and outside,	10	4	2	7	5	10	10	4	3	3	5	7	70

TABLE G.—Nationality of Persons Killed or Fatally Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
American,	....	....	1	....	....	....	1	....	....	1	....	....	3
English,	....	....	....	....	....	....	....	....	....	1	....	....	1
Irish,	....	....	....	....	....	....	....	1	....	....	....	....	1
German,	....	....	....	....	....	....	1	....	....	....	....	....	1
Polish,	2	....	....	....	1	....	....	....	1	1	1	....	6
Hungarian,	....	....	....	....	....	....	....	....	1	....	....	....	1
Lithuanian,	....	....	....	....	....	....	....	1	1	....	....	....	2
Austrian,	....	1	....	....	....	....	....	....	1	1	1	....	4
Russian,	....	....	....	....	....	....	....	....	1	....	....	....	1
Totals,	2	1	1	....	1	....	2	2	5	4	2	....	20

TABLE H.—Nationality of Persons Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
American,	1	....	1	4	2	5	4	1	....	....	1	2	21
English,	....	....	....	....	....	1	....	....	....	....	....	....	1
Irish,	....	1	1	....	....	....	1	....	....	....	....	....	3
German,	....	....	....	....	....	....	1	....	1	....	....	....	2
Polish,	6	1	....	3	1	1	3	2	....	3	3	5	28
Hungarian,	....	....	....	....	....	....	....	....	1	....	....	....	1
Italian,	2	....	....	....	....	2	....	....	....	....	....	....	4
Slavonian,	1	....	....	....	....	....	....	....	1	....	....	....	2
Austrian,	....	....	....	....	2	1	....	1	....	....	....	....	4
Russian,	....	2	....	....	....	....	1	....	....	....	1	....	4
Totals,	10	4	2	7	5	10	10	4	3	3	5	7	70

TABLE I.—Operators and mines, kind of openings, type and size of fans, size of furnaces, volume of air produced by fan or furnace per minute, number of splits of air currents, and number of persons employed inside

Names of Operators and Mines	Kind of opening	Gaseous or non-gaseous	Method of ventilation	Diameter of fan in feet	Width of blades in feet	Depth of blades in feet	Number of revolutions per minute	Water gauge developed—In inches	Name of fan	Power used	Number of splits of air currents	Number of cubic feet of air per minute entering the mine at inlet	Total quantity of air per minute circulating in all the splits in cubic feet	Number of persons employed inside
Philadelphia and Reading Coal and Iron Co.														
Bear Valley Colliery:														
Bear Valley No. 1, ...	Shaft,....	Gaseous,...	Fan,...	18	5.9	4.9	115	2.3	Guibal, ...	Steam,.....	5	51,690	39,290	325
Bear Valley No. 2, ...				15	3.11	5	90	2			7	46,830	34,760	
Big Mountain Colliery:														
Big Mountain No. 1, ...	Slope.....	Gaseous,...	Fan,...	12	4	3.6	120	1.4	Guibal, ...	Steam,.....	2	44,903	30,000	310
Big Mountain No. 2, ...				18	6	5.5	56	1.5			2	30,000	17,010	
Big Mountain No. 3, ...				18	6	5.5	62	1.2			3	32,000	15,300	
Burnside Colliery:														
Burnside No. 1, ...	Shaft,....	Gaseous,...	Fan,.....	15	4	5	85	1.1	Guibal, ...	Steam,.....	8	41,165	29,350	300
Burnside No. 2, ...	Shaft,....	Gaseous,...	Fan,.....	15	4	5	85	1.1			3	41,510	31,105	
Burnside No. 3, ...	Drift,....	Non-gas....	Fan,.....	15	4.2	5.6	38	1			4	35,000	27,000	
Henry Clay Colliery:														
Henry Clay No. 1, ...	Shaft,....	Gaseous,...	Fan,...	21	7	6.3	70	1.4	Guibal, ...	Steam,.....	3	25,410	22,810	225
Henry Clay No. 2, ...				18	6	5.4	80	1.8			6	35,240	31,070	
North Franklin Colliery:														
North Franklin No. 1, ...	Drift,....	Non-gas....	Fan,.....	18	6	6	65	.9	Guibal, ...	Electricity,..	5	42,150	28,750	350
North Franklin No. 2, ...	Slope,....	Gaseous,...	Fan,.....	18	5	5	80	1.4		Steam,.......	6	51,650	38,300	
North Franklin No. 3, ...	Slope,....	Non-gas....	Fan,.....	15	5	3.6	65	1		Electricity,..	3	26,450	14,950	

Stirling Colliery:														
Stirling No. 1,	Slope,	Gaseous,	Fan,	18	6	5.4	80	2.1	Guibal,	Steam,	5	40,000	29,000	300
Stirling No. 2,				21	7.2	6	65	1			4	50,000	33,000	
Stirling No. 3,				15	4.6	4.3	85	1.7			3	39,000	28,000	
Mineral Railroad and Mining Co.														
Cameron Colliery:														
Cameron No. 1,	Slope,	Gaseous,	Fan,	14	4	4	120		Guibal,	Steam,	5	35,000	28,000	600
Cameron No. 2,	Slope,			18	7	5.3	75	1.4			7	60,000	48,000	
Cameron No. 3,	Slope,			16	6	5.2	70	2.4			7	40,000	29,000	
Cameron No. 4,	Shaft,			16	6	5.2	96	2.2			5	50,000	38,000	
Luke Fidler Colliery:														
Luke Fidler No. 1,	Shaft,	Gaseous,	Fan,	18	7	5.2	84	1.8	Guibal,	Steam,	5	75,764	62,000	475
Luke Fidler No. 2,				18	7	5	106	2.6		Steam,	5	92,581	80,000	
Luke Fidler No. 3,				16	5	5.6	70	1.5		Electricity,	1	50,000	39,000	
Susquehanna Coal Co.														
Hickory Ridge Colliery:														
Hickory Ridge No. 1,	Slope,	Non-gas.	Fan,	15	4.1	4.8	62	1	Guibal,	Steam,	3	47,000	36,000	425
Hickory Ridge No. 2,	Slope,			18	7	5.6	50	.9	Vulcan,		4	65,000	53,500	
Hickory Ridge No. 3,	Drift,			12	4	3.1	90	1.2	Vulcan,		2	45,000	34,000	
Hickory Ridge No. 4,	Drift,			6	3.3	1.5	75	.8	Sturdevant,		1	25,000	14,500	
Hickory Swamp Colliery:														
Hickory Swamp No. 1,	Slope,	Non-gas.	Fan,	16	5.5	4.5	70	2	Mullen,	Steam,	4	58,000	46,000	200
Hickory Swamp No. 2,				6	3.3	1.5	40	.5	Sturdevant,	Steam,	1	25,000	14,000	
Buck Ridge Coal Co.														
Buck Ridge Colliery:														
Buck Ridge No. 1,	Slope,	Gaseous,	Fan,	14	4.6	4.6	92	1.1	Pollock,	Steam,	5	42,000	31,000	200
Buck Ridge No. 2,				12	3.6	3.6	90	1	Guibal,	Steam,	5	40,000	29,000	
Shipman Koal Co.														
Colbert,	Shaft,	Gaseous,	Fan,	16	5	4	80	1	Guibal,	Steam,	3	39,000	27,500	118
Excelsior Coal Co.														
Corbin Colliery:														
Corbin No. 1,	Drift,	Non-gas.	Fan,	10	3	3.6	40	1	Beadle,	Steam,	2	22,000	10,000	190
Corbin No. 2,	Drift,			10	3	3.6	40	1			2	22,500	10,000	
Corbin No. 3,	Slope,			16	5	5	60	1.3			2	26,000	14,000	
Corbin No. 4,	Slope,			14	5	5	60	1.4			2	23,000	11,000	
Llewellyn Mining Co.														
Royal Oak,	Slope and Drift,	Non-gas.	Fan,	18	4.9	4.1	70	2.5	Guibal,	Steam,	3	24,000	13,000	60

TABLE 1.—Operators, location of collieries, railroads, etc.

Names of Operators and Collieries	County	Name of General Superintendent	Post Office	Name of Superintendent	Post Office	Railroad to Mine
Philadelphia and Reading Coal and Iron Co.						
Bear Valley, Big Mountain, Burnside, Henry Clay, North Franklin, Stirling,	Northumberland,	W. J. Richards,	Pottsville,	Resse Tasker,	Pottsville,	P. and R.
Mineral Railroad and Mining Co.						
Cameron, Luke Fidler,	Northumberland,	Robert A. Quin,	Wilkes-Barre,	E. A. Rhoads,	Shamokin,	Pennsylvania
Susquehanna Coal Co.						
Hickory Ridge, Hickory Swamp,	Northumberland,	Robert A. Quin,	Wilkes-Barre,	W. R. Reinhardt,	Shamokin,	Pennsylvania
Buck Ridge Coal Co.						
Buck Ridge No. 2, Buck Ridge Washery,	Northumberland,	....	....	D. H. McGee,	Shamokin,	P. and R.
Shipman Koal Co.						
Colbert,	Northumberland,	John B. Corliss,	Detroit, Mich.,	E. J. Corliss,	Shamokin,	Pennsylvania
Excelsior Coal Co.						
Corbin,	Northumberland,	Andrew Robertson,	Shamokin,	George W. Robertson,	Shamokin,	P. and R.
Llewellyn Mining Co.						
Royal Oak,	Northumberland,	William H. Llewellyn,	Shamokin,	....	....	P. and R.
Trevorton Coal Land Co.						
New mine,*	....	....	....	E. R. Shurtleff,	Treverton,	

*Not yet named.

TABLE 2.—Number of tons of coal mined, number of days worked, number of persons employed, number killed and injured, quantity of powder and dynamite used, etc.

Names of Operators and Collieries	County	Number of tons of coal shipped to market	Number of tons used at collieries for steam and heat	Number of tons sold to local trade and used by employes	Total production of coal in tons	Number of days worked	Number of employes	Number of fatal accidents	Number of non-fatal accidents	Number of kegs of powder used	Number of pounds of dynamite used	Number of horses and mules
Philadelphia and Reading Coal and Iron Co.												
North Franklin,	Northumberland,	300,658	23,440	5,647	329,745	272	749	4	9	7,469	40,300	66
Bear Valley,		246,191	19,586	429	266,206	273	575	......	4	6,292	27,750	65
Burnside,		364,994	50,200	5,305	420,499	279	775	2	3	8,862	31,687	123
Stirling,							353	......	11	2,390	9,635	......
Henry Clay,		337,912	36,102	18,217	392,231	275	548	......	6	4,176	18,030	110
Big Mountain,							334	2	2	2,782	22,000	......
Totals,		1,249,755	129,328	29,598	1,408,681	.....	3,334	8	35	31,971	149,402	364
Mineral Railroad and Mining Co.												
Cameron,	Northumberland,	348,483	35,490	22,047	406,020	260	1,176	2	6	7,732	32,325	135
Luke Fidler,		170,061	30,488	13,153	213,702	243	630	4	3	4,877	14,049	72
Totals,		518,544	65,978	35,200	619,722	.....	1,806	6	9	12,609	46,374	207
Susquehanna Coal Co.												
Hickory Ridge,	Northumberland,	255,767	41,580	842	298,189	260	814	3	10	6,222	29,807	59
Hickory Swamp,		31,477	8,350	257	40,084	75	404	1	9	485	3,129	32
Totals,		287,244	49,930	1,099	338,273	.....	1,218	4	19	6,707	32,936	91

TABLE 2.—Continued

Names of Operators and Collieries	County	Number of tons of coal shipped to market	Number of tons used at collieries for steam and heat	Number of tons sold to local trade and used by employes	Total production of coal in tons	Number of days worked	Number of employes	Number of fatal accidents	Number of non-fatal accidents	Number of kegs of powder used	Number of pounds of dynamite used	Number of horses and mules
Buck Ridge Coal Co.												
Buck Ridge No. 2,	Northumberland,	101,748	5,580	864	108,192	290	235	......	4	3,000	3,500	16
Buck Ridge Washery,		39,653	2,900	20	43,573	.....	47	......	......	....	....	......
Totals,		141,401	9,480	884	151,765	.....	282	......	4	3,000	3,500	16
Shipman Koal Co.												
Colbert,	Northumberland,...	78,894	12,962	1,346	93,202	276	287	......	......	1,100	10,875	30
Excelsior Coal Co.												
Corbin,	Northumberland,...	74,676	13,700	....	88,376	252	262	2	......	3,320	4,900	19
Llewellyn Mining Co.												
Royal Oak,	Northumberland,...	14,460	4,500	359	19,319	120	180	......	3	513	200	14
Trevorton Coal Land Co.												
New mine,	Northumberland,...	....	660	366	1,026	67	21	......	......	125	3,250	12
Grand totals,		2,364,974	286,538	68,852	2,720,364	.....	7,390	20	70	59,345	251,437	753

TABLE 2.— PART 2

Names of Operators	County	Number of Boilers					Locomotives			Number of steam engines of all classes	Total horse power	Number of pumps delivering water to surface	Capacity in gallons per minute	Quantity delivered to surface per minute—gallons	Number of electric dynamos	Number of air compressors
		Cylindrical	Horse power	Tubular	Horse power	Total horse power	Steam	Air	Electric							
Philadelphia and Reading Coal and Iron Co.,	Northumberland,	......	......	62	8,710	8,710	5	......	3	88	12,243	30	27,100	14,650	3	4
Mineral Railroad and Mining Co.,		2	40	33	4,315	4,355	6	......	......	36	6,291	11	6,938	5,838	1	3
Susquehanna Coal Co.,		......	......	22	2,750	2,750	5	......	......	15	1,770	8	5,940	1,651	......	2
Buck Ridge Coal Co.,		......	......	7	900	900	1	......	......	20	685	2	1,380	400	......	......
Shipman Koal Co.,		......	......	7	770	770	......	......	......	13	750	3	1,930	490	......	1
Excelsior Coal Co.,		20	640	......	......	640	1	......	......	10	296	2	468	310	......	......
Llewellyn Mining Co.,		......	......	3	450	450	1	......	......	8	400	1	250	150	......	......
Trevorton Coal Land Co.,		......	......	1	300	300	......	......	......	1	25	....	....	....	......	1
Totals,	....	22	680	135	18,195	18,875	19	......	3	191	22,460	57	44,006	23,489	4	11

TABLE 3.—Number of each class of employes inside and outside of mines

Names of Operators and Collieries	County	Inside											Outside									
		Mine foremen	Assistant mine foremen	Fire bosses and assistants	Miners	Miners' laborers	Drivers and runners	Doorboys and helpers	Pumpmen	Company men	All other employes	Total inside	Superintendents	Foremen	Blacksmiths and carpenters	Engineers and firemen	Slate pickers (boys)	Slate pickers (men)	Bookkeepers and clerks	All other employes	Total outside	Grand total inside and outside
Philadelphia and Reading Coal and Iron Co.																						
North Franklin,	Northumberland,	1	....	6	225	97	29	2	2	59	65	486	....	1	9	21	33	21	4	174	263	749
Bear Valley,		1	1	5	158	57	17	5	4	51	51	350	....	2	6	19	47	19	3	129	225	575
Burnside,		2	2	6	255	66	38	8	2	59	75	513	....	2	10	31	54	16	3	146	262	775
Stirling,		1	....	4	117	84	17	4	2	33	60	322	....	1	4	4	....	....	1	21	31	353
Henry Clay,		1	....	4	122	64	24	13	......	28	70	326	....	1	8	29	40	6	3	135	222	548
Big Mountain,		1	....	3	123	56	16	3	3	26	53	284	....	1	....	13	....	....	1	35	50	334
Totals,		7	3	28	1,000	424	141	35	13	256	374	2,281	....	8	37	117	174	62	15	640	1,053	3,334
Mineral Railroad and Mining Co.																						
Cameron,	Northumberland,	1	6	13	364	98	60	18	7	23	217	807	1	2	23	33	143	9	7	151	369	1,176
Luke Fidler,		1	2	9	162	93	38	5	1	12	101	424	....	1	6	30	72	6	6	85	206	630
Totals,		2	8	22	526	191	98	23	8	35	318	1,231	1	3	29	63	215	15	13	236	575	1,806
Susquehanna Coal Co.																						
Hickory Ridge,	Northumberland,	1	3	3	216	105	26	5	6	106	20	491	....	2	47	49	100	12	8	105	323	814
Hickory Swamp,		1	1	3	109	50	16	5	5	45	20	255	....	1	5	14	55	5	4	65	149	404
Totals,		2	4	6	325	155	42	10	11	151	40	746	....	3	52	63	155	17	12	170	472	1,218
Buck Ridge Coal Co.																						
Buck Ridge No. 2,	Northumberland,	1	....	2	100	18	9	2	2	40	......	174	1	1	2	7	7	....	1	42	61	235
Buck Ridge Washery,		....	....	....	......	......	......	......	......	......	......	......	....	1	1	7	3	....	1	34	47	47
Totals,		1	....	2	100	18	9	2	2	40	......	174	1	2	3	14	10	....	2	76	108	282

Shipman Koal Co. Colbert,	Northumberland,	1	1	2	52	20	9	1	3	29	......	118	1	1	6	15	37	4	2	103	169	287
Excelsior Coal Co. Corbin,	Northumberland,	1	3	....	96	42	9	......	1	18	17	187	1	1	4	12	13	2	....	42	75	262
Llewellyn Mining Co. Royal Oak,	Northumberland,	1	1	2	56	12	2	......	2	12	......	88	1	1	3	7	36	8	1	35	92	180
Trevorton Coal Land Co. New mine,	Northumberland,	1	....	....	4	1	1	......	......	......	4	11	1	....	1	2	....	1	....	5	10	21
Grand totals,		16	20	62	2,159	863	311	71	40	541	753	4,836	6	19	135	293	640	109	45	1,307	2,554	7,390

TABLE 3.—PART 2

Names of Operators and Collieries	County	Number of Days Worked in Breaker												
		January	February	March	April	May	June	July	August	September	October	November	December	Total
Philadelphia and Reading Coal and Iron Co.														
North Franklin,	Northumberland,	20	19	18	25	24	25	23	22	23	26	23	24	272
Bear Valley,		20	22	17	25	24	25	24	23	24	26	23	20	273
Burnside, Stirling,		20	22	19	25	24	25	24	23	23	26	24	24	279
Henry Clay, Big Mountain,		19	22	17	25	23	25	24	23	24	26	23	24	275
Mineral Railroad and Mining Co.														
Cameron,	Northumberland,	22	20	24	19	22	23	24	21	21	21	21	22	260
Luke Fidler,		20	22	23	17	21	23	21	21	19	18	17	21	243
Susquehanna Coal Co.														
Hickory Ridge,	Northumberland,	21	20	21	24	20	23	24	24	21	21	17	24	260
Hickory Swamp,		18	17	21	19	....	....	....	....	....	....	....	....	75
Buck Ridge Coal Co.														
Buck Ridge No. 2,	Northumberland,...	26	24	23	24	25	25	25	26	22	26	22	22	290
Shipman Koal Co.														
Colbert,	Northumberland,...	26	24	25	24	24	25	25	26	9	23	22	23	276
Excelsior Coal Co.														
Corbin,	Northumberland,...	22	20	18	22	21	22	19	19	22	24	21	22	252
Llewellyn Mining Co.														
Royal Oak,	Northumberland,...	10	14	14	14	16	16	13	12	9	2	....	....	120
Trevorton Coal Land Co.														
New mine,	Northumberland,...	10	12	8	7	10	9	4	4	3	....	....	....	67

TABLE 4.—Fatal accidents inside and outside of mines

Date of accident	Name of Person	Nationality	Occupation	Age	Married or single	Number of widows	Number of orphans	Name of Mine	County	Nature and Cause of Accident in Brief
Jan. 21	Frank Valevitz,	Polish,	Miner,	45	M.	1	6	Luke Fidler,	Northumberland,	Back broken by fall of slate in old breast. Died in State Hospital January 24.
21	Enoch Glenefskie,	Polish,	Miner,	55	M.	1	....	Cameron,		Instantly killed by fall of slate at face of breast.
Feb. 1	Anthony Nobrobskie,	Russian,	Laborer,	23	S.	....	....	Big Mountain,		Instantly killed by fall of slate at face of gangway.
March 30	John F. Hawk,	American,	Starter,	47	M.	1	5	Cameron,		Suffocated by a rush of coal from a chute on the gangway.
May 14	Jacob Senoskie,	Polish,	Miner,	25	M.	1	....	North Franklin,		Fatally injured by fall of coal at face of breast. Died in State Hospital May 26.
July 8	Charles Bowman,	German,	Miner,	40	M.	1	8	Burnside,		Fatally injured by falling down manway. Died in State Hospital July 9.
Aug. 24	Emanuel Crawford,	American,	Miner,	25	S.	....	....	North Franklin,		Instantly killed by falling down manway.
24	Mark Rose,	Lithuanian,	Miner,	27	M.	1	....	Luke Fidler,		Instantly killed by premature blast.
31	M. J. Downey,	Irish,	Laborer,	68	S.	....	....	North Franklin,		Fatally injured while taking sills out of a car. Died September 4. Outside.
Sept. 5	William Swamber,	Lithuanian,	Laborer,	40	S.	....	....	Hickory Swamp		Instantly killed by fall of rock 20 feet from the face of gangway.
10	Andrew Stanislaw,	Hungarian,	Miner,	21	M.	1	....	Luke Fidler,		Fatally burned by powder in heading. Died in State Hospital September 11.
18	Dominic Rizzie,	Austrian,	Laborer,	23	S.	....	....	Burnside,		Back broken by fall of slate at face of gangway. Died in State Hospital January 10.
21	Andrew Dolenack,	Russian,	Driver,	19	S.	....	....	Hickory Ridge,		Fatally injured between a derailed car and gangway timber. Died September 23.
25	Martin Gimbizskie,	Polish,	Miner,	48	M.	1	1	Corbin,		Instantly killed by fall of clod at top of chute.
Oct. 5	Rufus Schuey,	American,	Miner,	27	M.	1	2	Hickory Ridge,		Instantly killed by fall of coal at face of working place.
9	Stani Leonavitz,	Polish,	Miner,	41	M.	1	8	Luke Fidler,		Instantly killed by fall of coal at face of working place.
11	Mike Matosack,	Russian,	Miner,	25	M.	1	....	Hickory Ridge,		Fatally injured by a premature blast. Died in State Hospital October 12.

TABLE 4.—Continued

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Number of widows	Number of orphans	Name of Mine	County	Nature and Cause of Accident in Brief
Oct.	29	Robert Harker, ...	English,.....	Miner, ...	47	M.	1	2	Big Mountain,..	Northumberland,	Fatally injured by being thrown under mine cars. He was riding on a trip of cars hauled by a locomotive from Big Mountain to Henry Clay colliery. Cars were derailed and he was thrown under them. Died same day. Outside.
Nov.	22	Lewis Novok, ...	Polish,.......	Miner, ...	25	M.	1	....	North Franklin,		Instantly killed by fall of coal at face of working place.
	25	Peter Lakuskie, ...	Russian,.....	Miner, ...	42	M.	1	8	Corbin, ...		Instantly killed by falling under car that was ascending the slope. He was in the act of jumping on car.

TABLE 5.—Non-fatal accidents inside and outside of mines

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Name of Mine	County	Nature and Cause of Accident in Brief
Jan.	4	Stani Kobillus,	Polish,	Laborer,	25	S.	Royal Oak,	Northumberland,	Head and breast lacerated by fall of slate at face of gangway.
	7	And. Vitcoskie,	Polish,	Miner,	54	M.	Henry Clay,		Leg fractured by a broken chain in buggy breast.
	7	John Youric,	Slavonian,	Miner,	28	M.	Cameron,		Leg fractured by fall of top coal at face of breast.
	7	Arthur Drumheller,	American,	Miner,	31	M.	Stirling,		Leg fractured by fall of top coal at face of breast.
	8	Lewis Votero,	Italian,	Miner,	32	M.	North Franklin,		Face and hands burned and body lacerated by explosion of a charge of powder they were forcing into a hole.
	8	John Belgic,	Italian,	Laborer,	30	S.			
	10	John Metzner,	Polish,	Miner,	50	M.	Stirling,		Arm and ribs fractured by fall of coal at face of pillar.
	10	George Gilleta,	Polish,	Miner,	40	M.			Limbs lacerated by fall of coal at face of pillar.
	15	Charles Jacobs,	Polish,	Miner,	56	M.	Cameron,		Leg fractured by fall of coal at face of work.
	22	Latie Hausner,	Polish,	Miner,	28	M.	Hickory Ridge,		Injured internally between car and chute.
Feb.	9	Ant. Sprock,	Russian,	Fireman,	28	S.	Hickory Ridge,		Middle finger of right hand cut off by being caught in the feed pump. Outside.
	13	William Sweeney,	Irish,	Fireman,	18	S.	Royal Oak,		Leg lacerated by being struck by a derailed car on the dirt plane. Outside.
	18	Steve Kilnick,	Russian,	Laborer,	35	S.	Hickory Swamp,		Little finger cut off. Caught between the rope and sheave wheel on the slope.
	27	George Malnick,	Polish,	Miner,	46	M.	Hickory Ridge,		Back bruised by fall of coal at face of breast.
March	9	James Lawler,	American,	Miner,	35	M.	Bear Valley,		Leg fractured by fall of slate on the gangway, about 15 feet from the face.
	16	Ed Purcell,	Irish,	Timberman,	42	M.	Stirling,		Ribs fractured by being caught between cars on top of slope. Outside.
April	16	Monroe Clements,	American,	Miner,	35	M.	Hickory Swamp,		Two toes fractured by fall of slate at face of work.
	17	Charles Benack,	Polish,	Miner,	35	M.	Bear Valley,		Leg fractured by fall of slate at face of breast.
	17	John Zedwinskie,	Polish,	Driver,	19	S.	Hickory Swamp,		Leg fractured by mine car on gangway.

TABLE 5.—Continued

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Name of Mine	County	Nature and Cause of Accident in Brief
April	14	Harry Shively, ...	American,...	Driver, ...	19	S.	Stirling, ...	Northumberland,	Leg fractured by mine car and fall of rock on the gangway, 450 feet from the face.
	22	John Maher, ...	Polish,.......	Miner, ...	33	M.	Cameron, ...		Leg fractured by fall of slate at working face.
	25	Henry L. Adams, ...	American,...	Miner, ...	38	M.	Hickory Ridge, ...		Leg fractured by fall of top coal at face of breast.
	27	Chas. E. Miner, ...	American,...	Laborer, ...	37	M.	Hickory Ridge, ...		Arm fractured by falling out of a wagon between Shamokin and the colliery. Outside.
May	17	Lewis Knowells, ...	American,...	Jig runner, ...	16	S.	Hickory Ridge, ...		Ribs fractured by being caught in a scraper line. Outside.
	19	William Bowers, ...	American,...	Pumpman, ...	30	M.	Royal Oak, ...		Abdomen bruised by being caught between mine car and the road on the slope.
	21	Thomas Dombruskie,..	Austrian,...	Laborer, ...	34	S.	Cameron, ...		Leg fractured by a prop falling on it at face of gangway.
	22	Ant. Chenitzskie, ...	Polish,.......	Miner, ...	45	M.	Hickory Ridge, ...		Leg fractured by fall of slate at working face.
	23	Joseph Schafer, ...	Austrian,...	Laborer, ...	32	S.	Henry Clay, ...		Leg fractured by a piece of gangway timber rolling on it.
June	5	Bernard Zupka, ...	Austrian,...	Laborer, ...	18	S.	Luke Fidler, ...		Injured internally. Squeezed between mine car and high side of gangway.
	7	Martin Sepo, ...	Italian,.....	Laborer, ...	28	S.	Hickory Swamp, ...		Leg fractured. A bar used in tunnel to hold boring machine fell on it.
	17	Frank Marseffie, ...	Italian,.......	Miner, ...	28	S.	Stirling, ...		Burned by an explosion of gas on the gangway.
	17	Oliver Snyder, ...	American,...	Fire boss, ...	44	M.			
	17	John Simindinger, ..	American,...	Fire boss, ...	40	M.			
	17	John Prosser, ...	American,...	Loader boss, ...	31	M.			
	18	Ant. Barrows, ...	Polish,.......	Miner, ...	29	M.	North Franklin, ...		Hand fractured and foot bruised by flying pieces of coal from a blast in the inside stump heading.
	19	James O'Brien, ...	American,...	Switch boy, ...	17	S.	Hickory Swamp, ...		Leg fractured by falling under mine cars while they were in motion.
	26	George Lucas, ...	English,.....	Miner, ...	28	S.	North Franklin, ...		Leg and body lacerated by falling down manway.

June	29	George Koons,	American,	Miner,	33	M.	North Franklin,	Northumberland,	Finger cut off by gangway collar falling on it.
July	1	John Klick,	Russian,	Laborer,	50	M.	Buck Ridge,		Injured internally by falling from a conveyor line while repairing it. Outside.
	3	John Engle,	American,	Miner,	30	M.	Bear Valley,		Leg fractured by a piece of clod falling on it at working face.
	13	John Shively,	German,	Laborer,	24	S.	Henry Clay,		Foot crushed by fall of slate at face of gangway.
	13	Hugh Culbertson,	Irish,	Laborer,	26	S.	Henry Clay,		Small bone in foot fractured by fall of slate at face of gangway.
	16	Stani Brovey,	Polish,	Miner,	42	M.	Bear Valley,		Small bone in leg fractured by walking under cage when it was descending the shaft.
	17	George Cherwank,	Polish,	Miner,	45	M.	North Franklin,		Small bone in foot broken by fall of coal at face of breast.
	25	Frank Ostrosheskie,	Polish,	Miner,	22	S.	Luke Fidler,		Leg fractured by fall of rock at face of breast.
	30	Fred Lehman,	American,	Laborer,	21	S.	Cameron,		Leg fractured by fall of rock at face of gangway.
	30	Samuel Faust,	American,	Miner,	43	S.	Stirling,		Leg fractured by fall of slate at face of working place.
	31	Jac. Gearhardt,	American,	Carpenter,	21	S.	Hickory Swamp,		Ribs fractured. Struck by a plank. Outside.
Aug.	2	Bensanto Dutko,	Polish,	Laborer,	37	M.	Hickory Ridge,		Leg fractured by fall of slate at face of breast.
	3	A. J. Madden,	American,	Assistant foreman,	38	M.	Hickory Swamp,		Collar bone fractured; head and face lacerated. Caught between mine cars and low side of gangway.
	9	John Boblick,	Austrian,	Miner,	59	M.	Luke Fidler,		Back bruised by fall of rock at face while robbing pillars.
	24	Joseph Ashinskie,	Polish,	Miner,	26	S.	Big Mountain,		Hands and face burned by gas at face of chute.
Sept.	9	Michael Lashanda,	Slavonian,	Fireman,	27	M.	Hickory Ridge,		Foot fractured by being caught between the connecting rod of engine and the bed plate. Outside.
	17	Frank Mowrey,	German,	Car runner,	38	M.	North Franklin,		Ribs broken and internally injured. A trip of dirt dumpers left the track and caught him on the trestle while he was turning the switch. Outside.
	28	Rube Stecker,	Hungarian,	Laborer,	21	S.	Hickory Ridge,		Leg fractured by fall of coal at face of breast.
Oct.	16	Leo. Ferris,	Polish,	Miner,	30	M.	Burnside,		Face and hands burned by gas that they had ignited with an open light at face of breast.
	16	Stani Novinskie,	Polish,	Miner,	35	M.	Burnside,		Face and hands burned by gas that they had ignited with an open light at face of breast.
	18	Dom. Ferras,	Polish,	Miner,	35	M.	Henry Clay,		Thigh fractured by rush of coal at face of breast.
Nov.	4	Geo. Pezela,	Polish,	Miner,	48	M.	Stirling,		Foot fractured by a piece of rock sliding out of breast and striking him, at face of working place.
	22	John Sodan,	Polish,	Miner,	37	M.	North Franklin,		Body bruised by fall of coal at face of working place while robbing pillars.
	23	Joseph Waldron,	Polish,	Driver and Loader,	21	S.	Big Mountain,		Arm fractured between mine car and plank on gangway.

TABLE 5.— Continued

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Name of Mine	County	Nature and Cause of Accident in Brief
Nov.	25	Joseph Kulick,	Russian,	Miner,	38	M.	Henry Clay,	Northumberland,	Back and arm lacerated by flying pieces of coal from a blast.
	29	William Kushner,	American,	Laborer,	26	S.	Hickory Swamp,		Hand fractured. Struck by a piece of coal that rolled down the chute.
Dec.	4	George Malnick,	Polish,	Miner,	47	M.	Hickory Ridge,		Head and body lacerated by flying pieces of coal from a blast.
	5	Val. Youcoskie,	Polish,	Miner,	23	S.	Cameron,		Hands and face burned by gas at face of breast.
	5	Joseph Weana,	Polish,	Miner,	33	M.	Burnside,		Hands and face burned by powder that was ignited by a spark from the lamp in a heading.
	6	Felix Colvich,	Polish,	Miner,	40	M.	Buck Ridge,		Face and hands burned by gas at face of old breast.
	10	William Helt,	American,	Miner,	30	M.	Buck Ridge,		Face and hands burned by gas at face of breast.
	21	Frank Childs,	Polish,	Bottom man,	35	S.	Buck Ridge,		Injured internally by a piece of slate that rolled down the slope and struck him.
	28	Amos Mattern,	American,	Miner,	24	S.	North Franklin,		Face and hands burned by powder that was ignited by a spark from a lamp in a heading.

CONDITION OF COLLIERIES

PHILADELPHIA AND READING COAL AND IRON COMPANY

North Franklin Colliery.—Ventilation and drainage good. Condition as to safety good.

Bear Valley Colliery.—Ventilation and drainage good. Condition as to safety good.

Burnside Colliery.—Ventilation fair; drainage good. Condition as to safety good.

Henry Clay Colliery.—Ventilation and drainage good. Condition as to safety good.

Big Mountain Colliery.—Ventilation and drainage good. Condition as to safety good.

Stirling Colliery.—Ventilation fair; drainage good. Condition as to safety good.

MINERAL RAILROAD AND MINING COMPANY

Cameron Colliery.—Ventilation and drainage fair. Condition as to safety good.

Luke Fidler Colliery.—Ventilation good; drainage fair. Condition as to safety good.

SUSQUEHANNA COAL COMPANY

Hickory Ridge Colliery.—Ventilation good; drainage fair. Condition as to safety good.

Hickory Swamp Colliery.—Ventilation and drainage fair. Condition as to safety good.

BUCK RIDGE COAL COMPANY

Buck Ridge No. 2 Colliery.— Ventilation and drainage good. Condition as to safety good.

SHIPMAN KOAL COMPANY

Colbert Colliery.—Ventilation and drainage fair. Condition as to safety fair.

EXCELSIOR COAL COMPANY

Corbin Colliery.—Ventilation and drainage good. Condition as to safety good.

TREVORTON COAL LAND COMPANY

New operation, not named.—Ventilation fair; drainage good. Condition as to safety good.

IMPROVEMENTS

PHILADELPHIA AND READING COAL AND IRON COMPANY

North Franklin Colliery.—A tunnel was driven south from the No. 9 vein to the No. 10 vein at breast No. 64, east South dip, slope workings, a distance of 366 yards,

A tunnel in Rennie water level, East No. 8½ vein, No. 2 gangway, at breast No. 65 north to No. 10½ vein, a distance of 187 yards.

An air tunnel 8x8 feet, at top of self-acting plane in No. 1 slope workings, a distance of 113 1-3 yards.

A landing tunnel at second lift of No. 2 slope, from No. 8 to No. 9 vein, for landing cars, a distance of 18 2-3 yards.

At the foot of the breaker two pumps 20x9x38 inches were erected to pump slush up on the slush bank.

Bear Valley Colliery.—A tunnel was driven from No. 10½ vein, north dip, to No. 11 vein, north dip, a distance of 87 1-3 yards.

A tunnel from No. 11 vein to No. 14 vein, north dip, a distance of 223 2-3 yards.

The pump house at bottom of No. 1 shaft has been enlarged, and a compound duplex Goyne pump 19 and 32x12x48 inches, has been installed.

A concrete engine house 50x40x20 feet was erected at No. 2 shaft, in which was placed a pair of engines 28x48 inches, to hoist from this shaft.

Burnside Colliery.—A tunnel was driven from No. 4 self-acting plane to No. 10½ vein, a distance of 27 2-3 yards.

An air tunnel 10x10 feet in shaft workings, third lift, from No. 9 to No. 10 vein, was driven a distance of 47 1-3 yards on a pitch of 20 degrees.

In the water level section an inside slope was driven in the No. 5 vein, a distance of 550 feet.

At the breaker a Goyne duplex washery pump 16x14x24 inches was installed.

Stirling Colliery.—One 9x11 inch engine, of 48 horse power, was installed to run a direct-current generator, for the purpose of lighting Burnside and Stirling collieries.

Henry Clay Colliery.—Re-opened No. 8 vein slope to the second lift of the shaft.

One pair of 20x30 inch engines has been erected to hoist from this slope.

Big Mountain Colliery.—An inside stable was driven in rock 35 yards.

This company has driven 1,144 2-3 yards of tunnel in this district during the year.

MINERAL RAILROAD AND MINING COMPANY

Luke Fidler Colliery.—One Guibal fan 16 feet in diameter, driven by electricity, was erected.

One electric engine was installed for operating fan and for lighting purposes.

SUSQUEHANNA COAL COMPANY

Hickory Ridge Colliery.—The breaker has been remodeled during the year and is now preparing the coal from Hickory Ridge and Hickory Swamp Collieries. Two miles of track have been laid and a 16-ton locomotive installed to take the coal from Hickory Swamp colliery to the Hickory Ridge breaker.

An inside slope was sunk a distance of 312 feet on the No. 4 vein.

A tunnel was driven from the bottom of No. 4 vein slope to No. 5 vein, a distance of 46 feet.

A pair of engines, Vulcan type, 18x24 inches, has been erected to hoist coal from the slope.

A Sturdevant fan 6 feet in diameter has been erected.

BUCK RIDGE COAL COMPANY

Buck Ridge No. 2 Colliery.—A Goyne pump 28x10x36 inches has been installed to deliver the water to the surface.

A tunnel was driven from the No. 15 vein, north dip, to the No. 14 vein, north dip, a distance of 182 feet.

A tunnel was driven from No. 13 vein, south dip, north a distance of 687 feet, but nothing workable was found.

A concrete powder house was erected on the surface.

EXCELSIOR COAL COMPANY

Corbin Colliery.—A new breaker was erected during the year, with a capacity of 600 tons per day, and equipped with the latest improved machinery.

A tunnel was driven in the No. 2 slope from No. 4 vein to the No. 5 vein, a distance of 31 feet.

A tunnel was driven in the No. 3 slope from the No. 4 vein to the No. 5 vein, a distance of 32 feet.

A tunnel was driven in the No. 1 slope from the No. 4 vein to the No. 5 vein, a distance of 64 feet.

Two Beadle fans, each 10 feet in diameter, have been erected during the year

Mine Foremen's Examinations

The annual examination of applicants for certificates of qualification as Mine Foremen and Assistant Mine Foremen was held in the Court House, Pottsville, May 8 and 9.

The Board was composed of the following members: Martin McLaughlin, Inspector, Shamokin; E. A. Rhoads, Superintendent, Shamokin; James McDonald, miner, Shamokin; Charles Mutchler, miner, Gowen City.

Only one of the applicants was successful in the examination and was recommended for a certificate.

Assistant Mine Foreman

B. F. L. Derrick.	Treverton.

Seventeenth District

CARBON AND SCHUYLKILL COUNTIES

Lansford, Pa., February 28, 1908.

Hon. James E. Roderick, Chief of Department of Mines:

Sir: I have the honor of transmitting herewith my first annual report as Inspector of Mines for the Seventeenth Anthracite District, for the year ending December 31, 1907.

Respectfully submitted,

ISAAC M. DAVIES,

Inspector.

SUMMARY OF STATISTICS

Number of collieries,	17
Number of mines,	19
Number of mines in operation,	19
Number of tons of coal shipped to market,	3,449,963
Number of tons used at mines for steam and heat,	381,277
Number of tons sold to local trade and used by employes,	103,272
Number of tons produced,	3,934,512
Number of tons produced by compressed air machines,	....
Number of tons produced by electrical machines,	....
Number of persons employed inside of mines,	4,677
Number of persons employed outside,	2,533
Number of fatal accidents inside of mines,	23
Number of fatal accidents outside,	4
Number of non-fatal accidents inside of mines,	35
Number of non-fatal accidents outside,	9
Number of tons of coal produced per fatal accident inside,	171,066
Number of persons employed per fatal accident inside,	203
Number of persons employed per fatal accident outside,	633
Number of persons employed per non-fatal accident inside,	134
Number of persons employed per non-fatal accident outside,	281
Number of wives made widows,	15
Number of children orphaned,	21
Number of steam locomotives used inside,	10
Number of steam locomotives used outside,	33
Number of compressed air locomotives used inside,	1
Number of electric motors used inside,	13
Number of electric motors used outside,	2
Number of fans in use,	16
Number of gaseous mines in operation,	14
Number of non-gaseous mines in operation,	5
Number of new mines opened,	1
Number of old mines abandoned (temporarily),	2

TABLE A

PRODUCTION OF COAL

Names of Operators	Tons
Lehigh Coal and Navigation Company,	3,178,016
Estate A. S. Van Wickle,	319,009
Coxe Brothers and Company, Incorporated,	309,940
Beddall Brothers and Company,	111,326
Hacklebernie Coal Company,	7,894
Moses Neyer,	5,379
Frank Adams,	2,948
Total,	3,934,512

Production by Counties

Carbon,	2,327,916
Schuylkill,	1,606,596
Total,	3,934,512

TABLE B.—Fatal and non-fatal accidents inside and outside of mines; number of tons of coal produced per accident; number of persons employed; number employed per accident

Names of Operators	Fatal Accidents			Non-fatal Accidents			Tons of coal produced per fatal accident inside	Tons of coal produced per non-fatal accident inside	Number of employes inside	Number of employes outside	Total number of employes	Number of employes inside per fatal accident	Number of employes outside per fatal accident	Number of employes inside per non-fatal accident	Number of employes outside per non-fatal accident
	Inside	Outside	Total	Inside	Outside	Total									
Lehigh Coal and Navigation Co.,	16	1	17	30	6	36	198,626	105,934	3,930	1,929	5,859	246	1,929	131	322
Estate A. S. Van Wickle,	3	1	4	2	2	4	106,336	159,505	431	296	727	144	296	216	148
Coxe Brothers and Co., Inc.,	2	1	3	1	1	2	158,970	309,940	201	184	385	100	184	201	184
Beddall Brothers and Co.,	2	1	3	2	....	2	55,663	55,663	93	112	205	46	112	46	....
Miscellaneous companies,	....	....	....	....	....	....	....	....	22	12	34	....	....	....	....
Totals and averages for district,	23	4	27	35	9	44	171,066	112,415	4,677	2,533	7,210	203	633	134	281

TABLE C.—Classification of Fatal Accidents Inside and Outside of Mines

	Months													
	January	February	March	April	May	June	July	August	September	October	November	December	Totals	Percentages
Causes of Accidents Inside														
Falls of slate,	....	....	1	....	....	....	....	1	....	....	....	....	2	8.70
Mine cars,	....	2	....	....	....	....	....	....	1	....	....	....	3	13.04
Explosions of gas and dust,	....	1	....	....	....	....	....	....	....	....	....	....	1	4.35
Falls of coal,	1	....	....	....	....	....	....	1	....	....	....	....	2	8.70
Explosions of powder and dynamite,	....	1	3	....	....	....	....	....	....	....	....	....	4	17.39
Falling into shafts,	....	....	....	....	....	....	....	....	....	1	....	....	1	4.35
Crushed at batteries,	....	1	....	....	....	....	....	....	....	....	....	....	1	4.35
Mules,	....	....	....	....	....	....	....	....	....	....	1	1	2	8.69
Electricity,	....	....	....	....	....	....	....	1	....	....	....	....	1	4.35
Miscellaneous,	2	1	....	....	....	1	1	....	....	....	....	1	6	26.08
Totals,	3	6	4	....	....	1	1	3	1	1	1	2	23	100.00
Causes of Accidents Outside														
Cars,	....	....	....	....	....	....	....	2	1	....	....	....	3	75.00
Machinery,	....	....	....	....	....	....	....	....	....	....	1	....	1	25.00
Totals,	....	....	....	....	....	....	....	2	1	....	1	....	4	100.00
Grand totals inside and outside,	3	6	4	....	....	1	1	5	2	1	2	2	27	

TABLE D.—Classification of Non-fatal Accidents Inside and Outside of Mines

	Months													
	January	February	March	April	May	June	July	August	September	October	November	December	Totals	Percentages
Causes of Accidents Inside														
Falls of coal,	....	....	2	....	....	....	....	....	....	....	....	....	2	5.71
Falls of roof,	1	....	....	....	....	....	....	....	....	....	....	....	1	2.86
Mine cars,	....	....	....	....	1	....	1	2	2	....	....	2	8	22.86
Explosions of gas and dust,	2	1	1	....	2	2	3	1	1	1	1	....	15	42.86
Explosions of powder and dynamite,	....	....	1	1	....	....	....	....	....	....	....	....	2	5.71
Premature blasts,	....	....	1	....	....	....	2	....	....	....	....	....	3	8.57
Miscellaneous,	....	....	....	....	....	....	....	1	....	2	....	1	4	11.43
Totals,	3	1	5	1	3	2	6	4	3	3	1	3	35	100.00
Causes of Accidents Outside														
Cars,	....	....	....	....	....	....	1	....	....	....	1	1	3	33.33
Machinery,	....	....	....	1	....	....	....	....	....	....	....	....	1	11.11
Miscellaneous,	1	....	....	....	....	....	1	2	....	1	....	....	5	55.56
Totals,	1	....	....	1	....	....	2	2	....	1	1	1	9	100.00
Grand totals inside and outside,	4	1	5	2	3	2	8	6	3	4	2	4	44	

TABLE E.—Occupations of Persons Killed or Fatally Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Inside													
Mine foremen,	....	....	....	....	....	....	....	....	1	....	....	....	1
Miners,	1	3	3	....	....	....	....	2	....	....	....	1	10
Miners' laborers,	2	....	1	....	....	1	....	1	....	1	....	....	6
Drivers and runners,	....	1	....	....	....	....	....	....	....	....	1	1	3
Company men,	....	2	....	....	....	....	....	....	....	....	....	....	2
All other employes,	....	....	....	....	....	....	1	....	....	....	....	....	1
Totals,	3	6	4	....	....	1	1	3	1	1	1	2	23
Outside													
Slatepickers (boys),	....	....	....	....	....	....	....	1	....	....	....	....	1
All other employes,	....	....	....	....	....	....	....	1	1	....	1	....	3
Totals,	....	....	....	....	....	....	....	2	1	....	1	....	4
Grand totals inside and outside,	3	6	4	....	....	1	1	5	2	1	2	2	27

TABLE F.—Occupations of Persons Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Inside													
Assistant mine foremen,	....	....	....	....	....	....	....	....	....	....	....	1	1
Miners,	1	1	4	....	1	1	4	2	....	3	1	....	18
Miners' laborers,	....	....	1	....	1	1	1	....	2	....	....	1	7
Drivers and runners,	....	....	....	....	....	....	1	1	1	....	....	....	3
Doorboys and helpers,	....	....	....	....	1	....	....	1	....	....	....	....	2
All other employes,	2	....	....	1	....	....	....	....	....	....	....	1	4
Totals,	3	1	5	1	3	2	6	4	3	3	1	3	35
Outside													
Blacksmiths and carpenters,	1	....	....	....	....	....	....	....	....	....	....	....	1
Slatepickers (boys),	....	....	....	1	....	....	....	1	....	....	....	....	2
All other employes,	....	....	....	....	....	....	2	1	....	1	1	1	6
Totals,	1	....	....	1	....	....	2	2	....	1	1	1	9
Grand totals inside and outside,	4	1	5	2	3	2	8	6	3	4	2	4	44

TABLE G.—Nationality of Persons Killed or Fatally Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
American,	1	4	....	....	....	....	1	2	1	....	1	1	11
Welsh,	....	....	1	....	....	....	....	....	....	....	....	....	1
Polish,	....	....	....	....	....	....	....	....	....	....	....	1	1
Hungarian,	2	....	1	....	....	....	....	1	....	....	....	....	4
Italian,	....	....	....	....	....	....	....	....	1	....	....	....	1
Slavonian,	....	1	1	....	....	1	....	1	....	1	1	....	6
Lithuanian,	....	1	1	....	....	....	....	....	....	....	....	....	2
Horwat,	....	....	....	....	....	....	....	1	....	....	....	....	1
Totals,	3	6	4	....	....	1	1	5	2	1	2	2	27

TABLE H.—Nationality of Persons Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
American,	4	1	1	2	....	....	4	1	1	2	....	1	17
English,	....	....	....	....	....	....	....	....	....	....	....	1	1
Welsh,	....	....	1	....	....	....	....	....	1	1	....	....	3
Scotch,	....	....	....	....	....	....	....	....	....	....	....	1	1
Irish,	....	....	....	....	....	....	....	....	....	1	....	1	2
Polish,	....	....	....	....	....	....	1	....	....	....	....	....	1
Hungarian,	....	....	....	....	1	....	....	2	1	....	....	....	4
Italian,	....	....	....	....	1	....	....	....	....	....	....	....	1
Slavonian,	....	....	3	....	1	2	2	3	....	....	2	....	13
Austrian,	....	....	....	....	....	....	1	....	....	....	....	....	1
Totals,	4	1	5	2	3	2	8	6	3	4	2	4	44

TABLE I.—Operators and mines, kind of openings, type and size of fans, size of furnaces, volume of air produced by fan or furnace per minute, number of splits of air currents, and number of persons employed inside

Names of Operators and Mines	Kind of opening	Gaseous or non-gaseous	Method of ventilation	Diameter of fan in feet	Width of blades in feet	Depth of blades in feet	Number of revolutions per minute	Water gauge developed—in inches	Name of fan	Power used	Number of splits of air currents	Number of cubic feet of air per minute entering the mine at inlet	Total quantity of air per minute circulating in all the splits in cubic feet	Number of persons employed inside
Lehigh Coal and Navigation Co.														
Nesquehoning Colliery:														
Number 1,	Shaft,	Gaseous,	Fan,	24	8	6	65	.9	Guibal,	Steam,	8	113,700	104,365	109
Number 1,	Tunnel,	Gaseous,	Fan,	15	5	3.9	82	.7	Guibal,	Steam,	7	59,800	50,040	99
Number 2,*	Shaft,	Non-gas.	Fan,	10	5	1.6	70	......	Sturdevant,	Steam,	......	......	......	......
Lansford Colliery:														
Number 4,	Slope,	Gaseous,	Fan,	21	7	5.3	75	......	Guibal,	Steam,	3	68,000	55,910	170
Number 4,*	Shaft,	Non-gas.	Natural,	......	......	......	......	......	......	......	......	......	......	......
Number 5,	Shaft,	Gaseous,	Fan,	21	7	5.3	50	......	Guibal,	Steam,	3	79,060	64,200	135
Number 6,	Shaft,	Gaseous,	Fan,	24	8	6	90	......	Guibal,	Steam,	3	44,964	30,612	162
Number 9,	Shaft,	Gaseous,	Fan,	24	8	6	70	1.5	Guibal,	Steam,	5	60,200	48,070	156
Coaldale Colliery:														
Number 8,	Shaft,	Gaseous,	Fan,	24	8	6	70	1.9	Guibal,	Steam,	4	85,370	75,472	161
Number 8,	Slope,	Gaseous,	Fan,						......	......	......	......	......	......
Number 10,	Shaft,	Gaseous,	Fan,	24	8	6	76	2.2	Guibal,	Steam,	4	53,220	41,100	152
Number 10,	Slope,	Gaseous,	Fan,	24	8	6	76	1.6	Guibal,	Steam,	5	66,880	54,000	246
Number 11,	Shaft,	Gaseous,	Fan,	24	8	6	75	1.9	Guibal,	Steam,	7	84,500	65,000	303
Number 11 "Fosters,"	Tunnel,	Gaseous,	Fan,	21	7	5.3	......	.8	Guibal,	Steam,	4	86,923	73,400	96
Number 12,	Slope,	Gaseous,	Natural,	......	......	......	......	......	......	......	2	......	......	32
Estate A. S. Van Wickle														
Coleraine Colliery:														
Buck Mountain,	Slope,	Gaseous,	Fan,	16	4	5	85	......	Guibal,	Steam,	5	59,850	48,150	174
Number 7 Gamma,	Slope,	Non-gas.												

*New shaft.

Coxe Brothers and Co. Inc.													
Beaver Meadow Colliery:													
Number 2, ...	Slope,....	Non-gas.	Fan,.....	20	6	5.6	75	......	Guibal, ...	Steam, ...	1	38,000	25,000	12
Number 4, ...	Slope,....	Non-gas.	Fan,.....	12	5	5.8	110	......	Guibal, ...	Steam, ...	3	47,500	35,600	96

Note—12 non-gaseous mines where robbing is done, no air measurements taken.
3 non-gaseous mines natural ventilation.

TABLE 1.—Operators, location of collieries, railroads, etc.

Names of Operators and Collieries	County	Name of General Superintendent	Post Office	Name of Superintendent	Post Office	Railroad to Mine
Lehigh Coal and Navigation Co.						
Colliery No. 1,	Carbon,	Baird Snyder, Jr.,	Lansford,	Hood McKay,	Lansford,	C R. R. of N. J.
Colliery No. 4,	Carbon,					
Colliery No. 5,	Carbon,					
Colliery No. 6,	Carbon,					
Colliery No. 8,	Schuylkill,					
Colliery No. 9,	Carbon,					
Colliery No. 10,	Schuylkill,	Baird Snyder, Jr.,	Lansford,	W. G. Whildin,	Lansford,	C. R. R. of N. J.
Colliery No. 11,	Schuylkill,					
Colliery No. 12,	Schuylkill,					
Colliery No. 14,	Schuylkill,					
No. 15, Washery,	Schuylkill,					
Screen Building,	Carbon,					
Estate A. S. Van Wickle						
Coleraine,	Carbon,	John Harvey,	Hazleton,			L. V. and C. R. R. of N. J.
Coxe Brothers and Co. Inc.						
Beaver Meadow,	Carbon,	S. D. Warriner,	Wilkes-Barre,	W. H. Davies,	Hazleton,	Lehigh Valley
Beddall Brothers and Co.						
Greenwood No. 13,	Schuylkill,	M. A. Gerber,	Tamaqua,			C. R. R. of N. J.
Hacklebernie Coal Co.						
Hacklebernie Tunnel,	Carbon,	D. S. Pursell,	Mauch Chunk,			C. R. R. of N. J.
Moses Neyer						
Black Rock,	Carbon,	Moses Neyer,	Summit Hill,	Elmer Neyer,	Summit Hill,	
Frank Adams						
Adams Drift,	Carbon,	Frank Adams,	Summit Hill,			

TABLE 2.—Number of tons of coal mined, number of days worked, number of persons employed, number killed and injured, quantity of powder and dynamite used, etc.

Names of Operators and Collieries	County	Number of tons of coal shipped to market	Number of tons used at collieries for steam and heat	Number of tons sold to local trade and used by employes	Total production of coal in tons	Number of days worked	Number of employes	Number of fatal accidents	Number of non-fatal accidents	Number of kegs of powder used	Number of pounds of dynamite used	Number of horses and mules
Lehigh Coal and Navigation Co.												
Colliery No. 1,	Carbon,	353,082	38,157	4,841	396,080	266	928	2	1	1,645	157,925	101
Colliery No. 4,	Carbon,	221,356	43,243	7,153	271,752	253	602	3	7	....	66,750	45
Colliery No. 5,	Carbon,	144,993	18,712	8,056	171,761	254	300	1	1	475	61,800	28
Colliery No. 6,	Carbon,	387,984	29,854	9,675	427,513	261	870	....	4	25	133,450	69
Colliery No. 8,	Schuylkill,	397,735	24,361	7,695	429,791	268	641	....	5	....	117,300	92
Colliery No. 9,	Carbon,	383,147	23,061	9,432	415,640	268	436	3	3	....	97,950	46
Colliery No. 10,	Schuylkill,	438,114	43,574	10,104	491,792	262	908	2	12	210	132,650	79
Colliery No. 11,	Schuylkill,	311,462	35,502	14,014	360,978	252	800	5	1	120	110,500	79
Colliery No. 12,	Schuylkill,	71,204	15,298	112	86,614	244	150	....	....	10	17,300	18
Colliery No. 14,	Schuylkill,	43,692	13,760	....	57,452	159	159	....	2	....	42,550	17
No. 15, Washery,	Schuylkill,	58,733	9,322	588	68,643	....	65	....	....	....	....	......
Screen Building,	Carbon,	....	....	....	....	....	....	1	....	....	....	......
Totals,	....	2,811,502	294,844	71,670	3,178.016	....	5,859	17	36	2.485	938,175	574
Estate A. S. Van Wickle												
Coleraine,	Carbon,	271,801	44,117	3,091	319,009	273	727	4	4	3,135	117.625	89
Coxe Brothers and Co. Inc.												
Beaver Meadow,	Carbon,	269,281	38,976	1,683	309.940	259	385	3	2	4,477	37.425	26
Beddall Brothers and Co.												
Greenwood No. 13,	Schuylkill,	94,440	2,983	13,903	111,326	266	205	3	2	26	25.700	15
Hacklebernie Coal Co.												
Hacklebernie Tunnel,	Carbon,	2,939	175	4,780	7.894	192	11	....	....	....	5.000	2

TABLE 2.— Continued

Names of Operators and Collieries	County	Number of tons of coal shipped to market	Number of tons used at collieries for steam and heat	Number of tons sold to local trade and used by employes	Total production of coal in tons	Number of days worked	Number of employes	Number of fatal accidents	Number of non-fatal accidents	Number of kegs of powder used	Number of pounds of dynamite used	Number of horses and mules
Moses Neyer Black Rock,	Carbon,	....	120	5,259	5,379	285	14	....	....	....	3,000	......
Frank Adams Adams Drift,	Carbon,	....	62	2,886	2,948	240	9	....	....	50	300	1
Grand totals,	....	3,449,963	381,277	103,272	3,934,512	....	7,210	27	44	10,173	1,127,225	707

TABLE 2.—PART 2

Names of Operators	County	Number of Boilers					Locomotives			Number of steam engines of all classes	Total horse power	Number of pumps delivering water to surface	Capacity in gallons per minute	Quantity delivered to surface per minute—gallons	Number of electric dynamos	Number of air compressors
		Cylindrical	Horse power	Tubular	Horse power	Total horse power	Steam	Air	Electric							
Lehigh Coal and Navigation Co.,	Carbon and Schuylkill,	23	424	127	25,389	25,813	28	......	15	176	9,216	*8	28,930	8,313	....	9
Estate A. S. Van Wickle,	Carbon,	....	....	21	2,190	2,190	6	......	......	36	1,340	7	7,347	2,466	1	....
Coxe Brothers and Co. Inc.,	Carbon,	....	....	11	2,300	2,300	6	1	......	32	1,735	1	1,200	1,100	2	2
Beddall Brothers and Co.,	Schuylkill,	... ...	....	7	420	420	3	......	......	......	....	......	....	....	....	....
Hacklebernie Coal Co.,	Carbon,	....	... .	1	60	60	......	......	......	1	45	......	....	....	....	....
Moses Neyer,	Carbon,	....	....	1	35	35	......	......	......	1	30	......	....	....	....	....
Frank Adams,	Carbon,	1	15	....	....	15	......	......	......	1	30	......	....	....	....	....
Totals,	....	24	439	168	30,394	30,833	43	1	15	247	12,396	16	37,477	11,879	3	11

*9 Tanks.

TABLE 3.—Number of each class of employes inside and outside of mines

Names of Operators and Collieries	County	Inside											Outside									Grand total inside and outside
		Mine foremen	Assistant mine foremen	Fire bosses and assistants	Miners	Miners' laborers	Drivers and runners	Doorboys and helpers	Pumpmen	Company men	All other employes	Total inside	Superintendents	Foremen	Blacksmiths and carpenters	Engineers and firemen	Slate pickers (boys)	Slate pickers (men)	Bookkeepers and clerks	All other employes	Total outside	
Lehigh Coal and Navigation Co.																						
Colliery No. 1,	Carbon,	2	3	7	111	82	57	5	14	207	182	670	....	3	10	29	23	35	1	157	258	928
Colliery No. 4,	Carbon,	2	....	5	35	13	28	11	4	137	169	404	....	1	12	22	25	38	1	99	198	602
Colliery No. 5,	Carbon,	1	....	5	24	52	16	2	....	63	85	258	....	....	......	2	......	......	1	39	42	300
Colliery No. 6,	Carbon,	3	....	6	102	89	30	12	2	142	95	481	....	1	15	31	34	74	2	232	389	870
Colliery No. 8,	Schuylkill,	2	....	6	128	30	34	14	....	161	110	485	....	1	6	19	12	19	1	98	156	641
Colliery No. 9,	Carbon,	1	....	3	165	10	20	5	7	59	65	275	....	2	9	15	11	14	1	109	161	436
Colliery No. 10,	Schuylkill,	1	2	6	168	39	57	18	....	222	98	611	....	1	13	39	38	56	1	149	297	908
Colliery No. 11,	Schuylkill,	2	....	5	96	85	45	6	5	231	111	586	....	1	12	32	26	38	1	104	214	800
Colliery No. 12,	Schuylkill,	2	....	1	4	......	6	....	3	14	14	41	....	1	1	11	12	31	1	49	106	150
Colliery No. 14,	Schuylkill,	....	....	....	4	......	5	....	2	99	6	116	....	1	......	8	3	7	......	24	43	159
No. 15, Washery,	Schuylkill,	....	....	....	......	......	......	....	....	......	......	....	....	1	1	......	4	5	......	54	65	65
Totals,	....	16	5	44	787	400	298	73	37	1,335	935	3,930	....	13	79	208	188	317	10	1.114	1,929	5,859
Estate A. S. Van Wickle Coleraine,	Carbon,	3	1	3	185	160	32	1	6	40	......	431	1	2	16	40	42	12	8	175	296	727
Coxe Brothers and Co. Inc. Beaver Meadow,	Carbon,	1	4	....	87	23	16	2	1	5	62	201	....	1	10	21	21	29	4	98	184	385
Beddall Brothers and Co. Greenwood No. 13,	Schuylkill,	1	....	....	49	21	8	1	....	13	......	93	1	1	4	6	24	1	1	74	112	205

Hacklebernie Coal Co. Hacklebernie Tunnel, ...	Carbon, ...	....	....	....	4	2	1	....	....	......	......	7	....	1	......	......	2	1	......	....	4	11
Moses Neyer Black Rock, ...	Carbon, ...	1	....	....	4	4	......	....	....	......	......	9	1	....	......	1	......	......	......	3	5	14
Frank Adams Adams Drift, ...	Carbon, ...	....	....	....	2	4	......	....	....	......	......	6	....	....	......	......	......	......	......	3	3	9
Grand totals, ...	....	22	10	47	1,118	614	355	77	44	1,393	997	4,677	3	18	109	276	277	360	23	1,467	2,533	7,210

TABLE 3.—PART 2

Names of Operators and Collieries	County	Number of Days Worked in Breaker												
		January	February	March	April	May	June	July	August	September	October	November	December	Total
Lehigh Coal and Navigation Co.														
Colliery No. 1,	Carbon,	23	19	23	22	23	23	21	24	19	23	23	23	266
Colliery No. 4,	Carbon,	22	21	22	22	22	22	22	24	20	21	22	13	253
Colliery No. 5,	Carbon,	20	19	18	22	23	23	21	23	18	22	22	23	254
Colliery No. 6,	Carbon,	22	21	22	23	23	22	22	24	17	23	22	20	261
Colliery No. 8,	Schuylkill,	23	21	23	23	22	23	22	24	20	23	22	22	268
Colliery No. 9,	Carbon,	22	22	23	23	23	23	21	24	20	23	22	22	268
Colliery No. 10,	Schuylkill,	23	20	22	22	24	22	22	23	18	23	21	22	262
Colliery No. 11,	Schuylkill,	22	19	23	21	23	23	22	24	15	23	22	15	252
Colliery No. 12,	Schuylkill,	17	19	23	22	23	23	22	24	20	23	21	7	244
Colliery No. 14,	Schuylkill,	......	......	......	......	4	22	22	23	20	23	23	22	159
Estate A. S. Van Wickle														
Coleraine,	Carbon,	23	22	23	22	23	23	23	24	22	23	23	22	273
Coxe Brothers and Co. Inc.														
Beaver Meadow,	Carbon,	21	21	21	22	22	22	22	23	21	22	21	21	259
Beddall Brothers and Co.														
Greenwood No. 13,	Schuylkill	22	22	23	22	23	22	22	24	21	22	22	21	266
Hacklebernie Coal Co.														
Hacklebernie Tunnel,	Carbon,	22	20	18	20	3	10	8	12	8	23	25	23	192
Moses Neyer														
Black Rock,	Carbon,	25	24	24	23	24	24	22	25	23	25	23	23	285
Frank Adams														
Adams Drift,	Carbon,	22	20	23	10	20	20	20	21	22	22	20	20	240

TABLE 4.—Fatal accidents inside and outside of mines

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Number of widows	Number of orphans	Name of Mine	County	Nature and Cause of Accident in Brief
Jan.	8	Peter Demko,	Hungarian,	Laborer,	22	S.	....	....	Beaver Meadow No. 4,	Carbon,	Suffocated in chute by rush of water and fine coal.
	24	John Delay,	American,	Miner,	62	M.	1	1	Greenwood No. 13,	Schuylkill,	Instantly killed by fall of coal.
	29	Ignaitz Razin,	Hungarian,	Laborer,	28	S.	....	....	Lansford No. 9 Shaft,	Carbon,	Fatally injured by falling on to the bumper of a car and fracturing his skull.
Feb.	2	Robert Miller,	American,	Driver,	17	S.	....	....	Lansford No. 4 Slope,	Carbon,	Fatally injured by being struck on the head by some substance while ascending the slope.
	11	William Cooper,	American,	Carpenter,	75	M.	1	....	Coaldale No. 11,	Schuylkill,	Instantly killed; run over by locomotive.
	12	Mike Surrey,	Slavonian,	Miner,	40	S.	....	....	Lansford No. 4,	Carbon,	Fatally injured by an explosion of gas. Died on the 19th.
	16	Jacob Molitchko,	Lithuanian,	Miner,	26	S.	....	....	Greenwood No. 13,	Schuylkill,	Instantly killed while starting a battery.
	16	George W. Bird,	American,	Hitcher,	43	M.	1	5	Coleraine,	Carbon,	Fatally injured by being caught between an empty and a loaded car.
	23	William Schaeffer,	American,	Miner,	34	M.	1	4	Coaldale No. 11,	Schuylkill,	Fatally injured by an explosion of dynamite.
March	14	John Gido,	Slavonian,	Miner,	47	M.	1	3	Nesquehoning No. 1 Tunnel,	Carbon,	Fatally injured by an explosion of dynamite.
	14	Paul Marlek,	Lithuanian,	Laborer,	32	M.	1	....	L. C. and N. Co. No. 1 Tunnel,	Carbon,	Instantly killed by an explosion of dynamite.
	26	Albert E. Jones,	Welsh,	Miner,	45	M.	1	....	Coaldale No. 11,	Schuylkill,	Fatally injured by an explosion of dynamite.
	27	Sylvester Strock,	Hungarian,	Miner,	34	M.	1	1	Coleraine,	Carbon,	Fatally injured by fall of slate.
June	18	Frank Suchan,	Slavonian,	Laborer,	44	M.	1	....	Coaldale No. 10,	Schuylkill,	Instantly killed while jumping on a moving cage.
July	18	Frank Walker,	American,	Loco. Engineer,	23	S.	....	....	Coaldale No. 11,	Schuylkill,	Fatally injured by running into a closed door.
Aug.	1	Bert Bolles,	American,	Miner,	25	S.	....	....	Lansford No. 9,	Carbon,	Instantly killed by fall of coal.
	5	John Ringer,	American,	Slate picker	15	S.	....	....	L. C. and N. Co. Screen Bldg.	Carbon,	Fatally injured by falling under a trip of cars. Outside.
	15	Joseph Ogrewich,	Horwat,	Laborer,	22	S.	....	....	Lansford No. 5,	Carbon,	Fatally injured by coming in contact with an electric wire. Died from the shock before being taken outside.

TABLE 4.— Continued

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Number of widows	Number of orphans	Name of Mine	County	Nature and Cause of Accident in Brief
Aug.	23	John Pulock, ...	Slavonian, .	Miner, ...	23	M.	1	....	Coleraine, ...	Carbon,......	Fatally injured by fall of slate. Died December 3.
	31	Michael Lazure, ...	Hungarian,	Laborer, ...	26	M.	1	1	Beaver Meadow No. 2,	Carbon,......	Instantly killed. Fell under locomotive. Outside.
Sept.	13	Nicholas Comera, ...	Italian,......	Car runner,	26	S.	....	....	Coleraine, ...	Carbon,......	Instantly killed. Run over by cars. Outside.
	19	Henry Fox, ...	American, ..	Inside foreman,	35	M.	1	2	Beaver Meadow No. 4,	Carbon,......	Fatally injured by runaway cars on slope.
Oct.	19	John Marachak, ...	Slavonian, .	Laborer, ...	23	S.	....	....	Lansford No. 9, ...	Carbon,......	Instantly killed by falling down shaft.
Nov.	4	Joseph Petrovich, ...	Slavonian, .	Laborer, ...	20	S.	....	....	Greenwood No. 13, ...	Schuylkill,...	Instantly killed by falling under sprocket wheel of scraper line. Outside.
	6	Thomas Aiken, ...	American, ..	Driver, ...	38	M.	1	1	Coaldale No. 10, ...	Schuylkill,...	Fatally injured by being kicked by a mule.
Dec.	21	Frank Straker, ...	Polish, ...	Miner, ...	28	M.	1	1	Lansford No. 4, ...	Carbon,......	Suffocated by a rush of coal while timbering on the gangway.
	28	Isaac Hollenback, ...	American, ..	Driver, ...	24	M.	1	1	Coaldale No. 11, ...	Schuylkill,...	Fatally injured by falling off mule and rupturing a blood vessel. He died after arriving home.

TABLE 5.—Non-fatal accidents inside and outside of mines

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Name of Mine	County	Nature and Cause of Accident in Brief
Jan.	8	Peter Smith,	American,	Miner,	52	M.	Coleraine,	Carbon,	Leg fractured by falling over rail while building a trestle. Outside.
	6	William Cragle,	American,	Carpenter,	36	M.	Coleraine,	Carbon,	Toes crushed by fall of rock in gangway.
	25	James Stapleton,	American,	Loader,	28	S.	Coaldale No. 10 Shaft,	Schuylkill,	Hands and face burned by explosion of gas.
	25	Patrick Stapleton,	American,	Loader,	35	M.	Coaldale No. 10 Shaft,	Schuylkill,	Hands and face burned by explosion of gas.
Feb.	7	Aaron Boyle,	American,	Miner,	45	M.	Lansford No. 6 Shaft,	Carbon,	Hands and face burned by explosion of gas.
March	6	James Reese,	Welsh,	Miner,	36	S.	Coaldale No. 10 Shaft,	Schuylkill,	Hands and face burned by explosion of gas.
	8	Paul Sotack,	Slavonian,	Miner,	50	M.	Lansford No. 4 Slope,	Carbon,	Back injured by fall of coal in face of chute.
	8	John Stepko,	Slavonian,	Miner,	25	M.	Lansford No. 4 Slope,	Carbon,	Back injured by fall of coal in face of chute.
	14	John Malinchock,	Slavonian,	Laborer,	28	S.	Nesquehoning No. 1 Tunnel,	Carbon,	Head and face lacerated by explosion of dynamite.
	15	John O'Donnell,	American,	Miner,	25	S.	Coaldale No. 8 Shaft,	Schuylkill,	Face and breast lacerated by a premature blast.
April	6	Richard Johns,	American,	Chute tender,	16	S.	Lansford No. 6 Shaft,	Carbon,	Arm and leg fractured. Caught in chip screen shaft. Outside.
	8	Peter Moser,	American,	Battery starter,	42	S.	Lansford No. 9 Shaft,	Carbon,	Forearm fractured and face lacerated by explosion of dynamite.
May	7	Frank Boyer,	Hungarian,	Miner,	36	M.	Lansford No. 4 Slope,	Carbon,	Hands and face burned by explosion of gas.
	7	Peter Tona,	Italian,	Laborer,	32	M.	Lansford No. 4 Slope,	Carbon,	Hands and face burned by explosion of gas.
	28	Martin Zwana,	Slavonian,	Sheet boy,	17	S.	Lansford No. 4 Slope,	Carbon,	Hand and wrist crushed while spragging loaded car.
June	14	Antonie Matula,	Slavonian,	Miner,	47	M.	Lansford No. 6 Shaft,	Carbon,	Face, hands and back burned by explosion of gas.
	14	Steve Evanish,	Slavonian,	Laborer,	37	M.	Lansford No. 6 Shaft,	Carbon,	Face and hands burned by explosion of gas.
July	5	Harry Jermyn,	American,	Crane man,	46	M.	Coleraine,	Carbon,	Left leg fractured by falling off steam shovel. Outside.

TABLE 5.—Continued

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Name of Mine	County	Nature and Cause of Accident in Brief
July	13	Martin Shosky,	Polish,	Laborer,	35	S.	Coaldale No. 10,	Schuylkill,	Hands and face burned by explosion of gas.
	15	Fred Staeb,	American,	Driver,	16	S.	Coaldale No. 14 Shaft,	Schuylkill,	Chest and hips bruised by falling off car.
	17	Mike Barno,	Slavonian,	Miner,	35	S.	Coaldale No. 10 Shaft,	Schuylkill,	Hands and body lacerated by premature blast.
	23	Stiney Esmond,	Lithuanian,	Miner,	37	S.	Greenwood No. 13 Tunnel,	Schuylkill,	Hands and body lacerated by premature blast.
	26	John Rusnok,	Slavonian,	Driver,	18	S.	Coaldale No. 8,	Schuylkill,	Right arm fractured by falling under car. Outside.
	30	Patrick McGulrick,	American,	Miner,	42	M.	Coaldale No. 10 Shaft,	Schuylkill,	Hands and face burned by explosion of gas in chute.
	30	Frank N. Boyle,	American,	Miner,	35	S.	Coaldale No. 10 Shaft,	Schuylkill,	Hands and face burned by explosion of gas in chute.
Aug.	3	Thomas Sodosky,	American,	Patcher,	16	S.	Greenwood No. 13 Tunnel,	Schuylkill,	Calf of right leg injured. Caught between bumpers of cars.
	17	Steve Katkourski,	Slavonian,	Driver,	20	S.	Lansford No. 9 Shaft,	Carbon,	Foot cut and bruised. Caught between car bumpers.
	17	Joseph Thoedock,	Slavonian,	Miner,	27	S.	Coaldale No. 10,	Schuylkill,	Face and hands slightly burned by explosion of gas.
	21	John Gordon,	Hungarian,	Miner,	46	M.	Beaver Meadow No. 4,	Carbon,	Rib fractured by falling on lagging that was across two props in chute.
	22	Mike Keista,	Slavonian,	Hopper boy,	17	S.	Coaldale No. 8,	Schuylkill,	Left leg fractured by falling off ladder while playing during dinner hour. Outside.
	26	John Mandel,	Hungarian,	Bottom man,	39	M.	Beaver Meadow No. 2,	Carbon,	Head injured by piece of coal falling off cage at breaker. Outside.
Sept.	16	John Bisick,	Hungarian,	Laborer,	19	S.	Coleraine No. 2,	Carbon,	Hip injured. Caught between car and props.
	17	Thomas Gallagher,	American,	Driver,	18	S.	Coaldale No. 10,	Schuylkill,	Face burned by explosion of gas.
	19	Thomas J. Evans,	Welsh,	Laborer,	37	M.	Coaldale No. 14 Shaft,	Schuylkill,	Toes crushed between bumpers of cars.
Oct.	8	William Davis,	Welsh,	Miner,	49	M.	Shepps Tunnel,	Schuylkill,	Bone in ankle fractured when jumping down from chute.
	21	James Cadden,	Irish,	Miner,	47	M.	Lansford No. 5 Shaft,	Carbon,	Leg fractured by collar falling on it while plumbing a set of timber.

Oct.	25	Frank Rubright, ...	American, ..	Miner, ...	47	M.	Coaldale No. 10 Shaft, ...	Schuylkill,...	Hands and face burned by explosion of gas.
	26	Harry O'Brian, ...	American, ..	Bank boss, ...	40	M.	Coaldale No. 8, ...	Schuylkill,...	Jaw bone fractured by falling off platform. Outside.
Nov.	14	John Krikovich, ...	Slavonian, .	Patcher, ...	19	S.	Coaldale No. 8, ...	Schuylkill,...	One finger severed, another bruised, while unhooking car from motor. Outside.
	19	Paul Serochic, ...	Slavonian, .	Miner, ...	33	S.	Fosters Tunnel, ...	Schuylkill,...	Face and wrist slightly burned by explosion of gas. Outside.
Dec.	28	David Yemm, ...	English,.....	Assistant foreman,	30	M.	Coaldale No. 10 Shaft, ...	Schuylkill,...	Both knees bruised. Caught between motor and car.
	28	James Flynn, ...	Irish, ...	Driver boss, ...	35	M.	Coaldale No. 10 Shaft, ...	Schuylkill,...	One knee bruised. Caught between motor and car.
	30	Patrick McCullion, ...	American, ..	Car runner, ...	19	S.	Lansford No. 4, ...	Carbon,......	Side contused. Squeezed between cars. Outside.
	30	David Gibson, ...	Scotch, ...	Laborer, ...	25	S.	Lansford No. 4 Slope, ...	Carbon,......	Hands, face and side lacerated. He was in the act of starting a battery with a charge of powder when it started of its own accord, knocking him down an empty chute.

FATAL ACCIDENTS

Falls of Coal, Slate and Roof

January 24, No. 13 Greenwood, Beddall Brothers, John Delay, American, miner, was instantly killed. He had just fired a blast in the coal in his breast, in the "C" seam, and returned to see the result, when a piece of coal fell on him.

March 27, Coleraine Colliery, Estate A. S. Van Wickle, Sylvester Strock,Hungarian, miner, was employed robbing pillars in Wharton vein, No. 9 slope. He had fired a shot that had knocked out a prop, and instead of replacing the prop at once he thoughtlessly began trimming the coal, when a piece of slate fell on him, causing a contusion of the pelvic bone and other internal injuries from which he died during the night in the Hazleton State Hospital.

August 1, No. 9 Shaft, Lehigh Coal and Navigation Company, Bert Bolles, American, miner, was buried in his breast by a fall of coal, and before he could be extricated life was extinct.

August 23, Coleraine Colliery, Estate A. S. Van Wickle, John Pulock, Slavonian, miner, was fatally injured by a fall of slate or roof. He had fired a hole on the inside rib, preparatory to starting a heading from 93 to 94 breast in the Buck Mountain vein, Buck Mountain slope. He did not observe the necessary care in examining the top after firing a shot, consequently a loose piece of slate fell on him, fracturing his spinal column. Died December 3.

Mine Cars, Inside

February 16, Coleraine Colliery, Estate A. S. Van Wickle, George W. Bird, American, bottom-man, in the Buck Mountain slope, 3rd level, was in the act of spragging a car on the empty track when it became derailed and knocked him against the loaded cars on the other track with such force that he died from the effect on the following day.

September 19, Beaver Meadow Slope No. 4, Coxe Brothers and Company, Incorporated, Henry Fox, American, inside foreman, was fatally injured. Two cars were being hoisted up the slope. When they were about 500 feet from the bottom the hitching staple broke and the cars ran back. When 50 feet from the bottom the last car became derailed on the east side of the slope, and Fox, who was standing on that side, was struck by the car and knocked against the cribbing at the bottom. He died an hour after being taken home. The men near the bottom heard the cars coming and warned every one of the danger and the drivers got their teams to a place of safety, but Mr. Fox did not move until struck by the car.

Explosions of Gas and Dynamite

February 12, No. 4 Slope, Lehigh Coal and Navigation Company, Mike Surrey, Slavonian, miner, was fatally burned by gas in No. 118 breast, East Mammoth. He had been warned by the fire boss that the back manway was blocked and that he should not go up into his breast until he, the fire boss, came in. Disregarding the warning, Surrey went up the back manway with a naked light and removed the obstruction, when the gas came down on him, burning him so badly that he died at the Ashland State Hospital, February 19.

February 23, No. 11 Shaft, Lehigh Coal and Navigation Company, William Schaeffer, American, miner, was fatally injured. While in the act of preparing a charge of dynamite it exploded, blowing off his left hand and seriously injuring him about the face. He was unable to give an account of the accident. He died within half an hour after being taken home. He was alone when the accident occurred.

March 26, No. 11 Shaft, Lehigh Coal and Navigation Company, Albert E. Jones, Welsh, contract miner, was fatally injured by an explosion of dynamite. It appears that George J. Miller, a miner, employed by Jones, was about to start a battery with three half-sticks of dynamite tied together. While endeavoring to secure them in the battery they fell, striking his lamp, became ignited, and rolled down the chute, which was empty, to the dirt-board. Jones, who was only a short distance away on the gangway, saw the blaze and went to investigate the cause. When he got near the chute the dynamite exploded, injuring him so severely that he died in the Ashland State Hospital, Apirl 2.

March 14, No. 1 Tunnel, Nesquehoning, Lehigh Coal and Navigation Company, John Gido, Slavonian, miner, was fatally injured and his laborer, Paul Marlek, instantly killed. They had a hole drilled in the bottom slate in the gangway and were in the act of tamping dynamite in the hole with a steel bar when it exploded. Gido died the same day.

Falling into Shaft

October 19, No. 9 Shaft, Lehigh Coal and Navigation Company, John Marachak, Slavonian, laborer, was instantly killed. He was employed with others sinking the shaft, which at the time was down 121 feet below the second level. He evidently came late to work, as he was not there to go down with the other men, and the top-men did not see him or know that he was there until they got word from the second level that he had fallen down the shaft.

Crushed at Battery

February 16, No. 13, Greenwood, Beddall Brothers and Company, Jacob Molitchko, Lithuanian, miner, was instantly killed in the west "C" vein. He went inside the battery to start it with a pick, and before he could escape a rush of coal caught him and crushed him to death.

Mules, Inside

November 6, No. 10 Shaft, Lehigh Coal and Navigation Company, Thomas Aiken, American, driver, was fatally injured. He was driving a five mule team from foot of shaft to the east-side turnout. When found he was in a sitting posture between the props and cars on the turnout, with his face cut and his neck broken. There was no one near when the accident occurred, and it is supposed that he was kicked by a mule. He died a few minutes after being picked up.

December 28, No. 11 Shaft, Lehigh Coal and Navigation Company, Isaac Hollenback, American, driver, was fatally injured. After finishing his day's work, he was riding out the east No. 2 gangway on his hind mule when the mule stumbled and threw him off. He struck his head on a rail. He got up and walked a mile to the bottom of the shaft and then half way out the tunnel. From there he was carried home. He died about 20 minutes after reaching his home.

Miscellaneous, Inside

January 8, Beaver Meadow, No. 4 Slope, Coxe Brothers and Company, Incorporated, Peter Demko, Hungarian, laborer, was suffocated while in the act of starting a check battery in chute No. 3, Buck Mountain vein. Owing to an accumulation of water, the coal, being fine, suddenly rushed into the chute and traveling way below the check, burying Demko completely. He was suffocated before he could be relieved.

January 29, No. 9 Shaft, Lehigh Coal and Navigation Company, Ignaitz Razin, Hungarian, laborer, was fatally injured. While making room to put down a platform in the East Top Mammoth gangway, he heard a pole break above his head. In attempting to jump back out of danger his heel was caught by a plank, causing him to fall and strike his head against the bumper of a car fracturing his skull. He died January 31.

February 2, No. 4 Slope, Lehigh Coal and Navigation Company, Robert Miller, driver, was fatally injured. While on the cage ascending the slope with six men, he was struck on the head by some hard substance that fractured his skull. He died February 8.

February 11, No. 11 Shaft, Lehigh Coal and Navigation Company, William Cooper, American, carpenter, was instantly killed. He was walking out of the main tunnel when he either fell in front of the locomotive or was knocked down and it ran over him. No one saw the accident.

June 18, No. 10 Shaft, Lehigh Coal and Navigation Company, Frank Suchan, Slavonian, laborer, was instantly killed. While attempting to jump on a moving cage he was caught between a centre prop and the cage.

July 18, No. 11 Shaft, Lehigh Coal and Navigation Company, Frank Walker, American, engineer, inside, was fatally injured. While assisting another engineer to do some oiling that could be done best while the engine was in motion, the engine ran into a closed door, and fractured Walker's skull. He died September 1.

August 15, No. 5 Shaft, Lehigh Coal and Navigation Company, Joseph Ogrewitch. Horwat, laborer, was fatally injured. While loading a car at chute No. 19 he came in contact with an electric wire and received a shock from which he died before he was taken from the mines.

December 21, No. 4 Slope, Lehigh Coal and Navigation Company, Frank Straker, Polish, miner, was suffocated. The accident occurred while he was stripping a set of gangway timber which was low and had to be changed. He was in the act of spragging the high side leg when the side broke away suddenly and covered him with fine coal, causing his death by suffocation before he could be rescued. Had he taken advice of the night foreman in reference to spragging his timber before starting to strip it, the accident might not have occurred.

Cars, Outside

August 5, Screen Building, Hauto, Lehigh Coal and Navigation Company, John Ringer, American, slate picker, was fatally injured. In attempting to jump on a train of moving cars he fell and the wheels passed over his leg, severing it above the ankle.

September 13, Coleraine Colliery, Estate A. S. Van Wickle, Nicholas Comera, Italian, car runner, was instantly killed. He was standing between two cars and was about to run them to the breaker to be loaded, when a Philadelphia and Reading crew ran a train of empty cars against the car on which he stood with such force that he fell under the car and was almost instantly killed.

Miscellaneous, Outside

August 31, Beaver Meadow Colliery, Coxe Brothers and Company, Incorporated, Michael Lazure, Hungarian, laborer, was instantly killed by falling under a locomotive. He was riding on an empty truck and attempted to step from the truck to the locomotive. Not being coupled, they separated and he fell between them and was killed before the locomotive could be stopped.

November 4, No. 13 Greenwood, Beddall Brothers and Company, Joseph Petrovich, Slavonian, laborer, was instantly killed. In spite of previous warnings, he tried to pass around the end of the scraper line and in doing so his foot slipped and he fell and was drawn under the sprocket wheel and crushed to death.

CONDITION OF COLLIERIES

LEHIGH COAL AND NAVIGATION COMPANY

No. 1 Colliery.—Ventilation fair, drainage and general condition as to safety good.

No. 4 Colliery.—Ventilation and drainage fair. Roads good.

No. 5 Colliery.—Ventilation good, drainage and general condition as to safety good.

No. 6 Colliery.—Drainage fair, ventilation and general condition as to safety good.

No. 8 Colliery.—Ventilation and drainage good.

No. 9 Colliery.—General condition fair.

No. 10 Colliery.—Drainage fair, general condition as to safety good.

No. 11 Colliery.—Ventilation good, drainage fair.

No. 12 Colliery.—Drowned out at present.

No. 14 Colliery.—Ventilation fair, drainage good.

No. 15 Washery.—In good condition.

ESTATE A. S. VAN WICKLE

Coleraine Colliery.—The principal work done at this colliery is robbing, except in the Buck Mountain and No. 7 Gamma slope, where the ventilation, drainage and condition as to safety are good.

COXE BROTHERS AND COMPANY, INCORPORATED

Beaver Meadow Colliery, Nos. 2 and 4 Slopes.—Ventilation and drainage good. General condition as to safety good.

BEDDALL BROTHERS AND COMPANY

Greenwood No. 13.—Ventilation good, drainage fair. Principal work done is robbing.

HACKLEBERNIE COAL COMPANY

Hacklebernie Tunnel.—Ventilation good, drainage fair.

MOSES NEYER

Black Rock Colliery.—Ventilation and drainage good.

W. R. McCREADY

McCready's Colliery.—General condition good. Principal work done is robbing. Leased from the Lehigh Coal and Navigation Company.

IMPROVEMENTS

LEHIGH COAL AND NAVIGATION COMPANY—EASTERN DIVISION

Colliery No. 1, (Nesquehoning).—The erection of a new 3,000-ton breaker was started in August and was about one-third completed at the end of the year.

A pair of 30x60 first-motion engines was installed at the new No. 2 shaft, and the turnouts at the No. 1 shaft level were started. This work is being done in order to take all the coal below water-level from the one opening.

The shaft was sunk a total depth of 451 feet to the level of the Lausanne tunnel drainage gangway.

Colliery No. 4, (Lansford).—Two special steel cars have been erected and are now used on this slope for hoisting men. The use of these cars reduces to a minimum the danger of accident from anything falling into the slope while men are being hoisted.

The foundations for a new steel-cased motor-driven fan have been completed and the material for its erection is on the ground. This fan is for the purpose of insuring good ventilation for the extension of work in No. 4 Colliery.

Electric motors with the necessary rotary converter were also installed at this colliery, which have done away with a considerable number of mules.

Collieries Nos. 5 and 6, (Lansford).—Motors were also installed at these collieries for the same purpose as at No. 4.

A shaft was sunk at No. 6 about 600 feet which will eventually take the coal from both sides of the basin at this point and save considerable overland haulage to these plants.

Collieries Nos. 8 and 9.—Electric haulage was installed at No. 8 which has done away with a considerable number of mules and materially increased the output.

No. 9 shaft was extended another lift to the level of the water-shaft and will be connected across the basin north to the gangways from the drainage tunnel, which will make this colliery a water-level proposition for some time to come.

The Lausanne drainage tunnel is now one-half mile long and is progressing favorably.

LEHIGH COAL AND NAVIGATION COMPANY—WESTERN DIVISION

Colliery No. 11, (Coaldale).—The tunnel across the basin was driven until it cut the Orchard and Primrose veins. Gangways will be turned on these veins.

Improvements have been made in the boiler plants, which have resulted in the saving of fuel.

The breaker has been considerably improved so that the output may be better handled.

Colliery No. 14.—The North tunnel has been driven north and has cut the Primrose and three splits of the Mammoth vein and will shortly cut the Buck Mountain vein.

The South tunnel is being driven across the basin to work the veins on the north dip. This tunnel will be about 4,300 feet long when completed.

The water in the Primrose workings was tapped during May. Some water still remains in these old workings, dammed back by numerous falls.

The water in the old Mammoth workings was successfully tapped and is being carefully let off.

The gangways driven east and west from the old Greenwood fire district are now being connected by a short plane. The indications are that the fire has been extinguished.

New steel head frames were erected over the water and coal shafts during the year.

A 600 H. P. battery of Stirling boilers was added.

The new breaker is partly completed.

Screen Building.—A new elevator and scraper line for the handling of stock coal was installed.

Hauto Coal Storage Yard.—A 240,000-ton capacity Dodge coal storage plant is being erected about one and one-half miles east of Hauto Station. The machinery will be driven electrically by power from the Lansford power house.

ESTATE A. S. VAN WICKLE

Coleraine Colliery.—Breaker. Constructed two conveyor lines 300 feet in length to remove slate and dirt from the breaker to the waste-bank.

No. 1 Slope.—An emergency pump installed, Stockton make, 30x15x36 inches, with column and steam lines.

Buck Mountain Slope.—A rock chute driven from the 3rd level Buck Mountain vein to tap a basin of coal in the west end of the Gamma vein workings, length 70 feet, angle 20 degrees. At the bottom of the slope a storage dam was built to hold water 26 hours in case of accident to the pumps.

No. 7 Buck Mountain Slope.—A tunnel 7x10x265 feet long driven from the Gamma to the Buck Mountain vein.

Gamma Vein.—A second opening made to the Buck Mountain slope to be used as a manway and mule way; also new stable built to hold eighteen mules. A very neat wash-house 12x24 feet has been erected on top of this slope. It is furnished with steam heat and also with lockers in which clothing may be kept, which is greatly appreciated by the men.

Buck Mountain Slope, Gamma Vein.—A brick shanty built for the fire bosses, and a medical room for the care of the injured, heated by steam; also a Jeanesville Duplex pump, 18x8x18 inches, installed.

No. 8 Slope.—A tunnel 7x10x140 feet long driven to tap the Wharton vein.

Flory Slope, Mammoth Vein.—A slope sunk in the east dip 450 feet long, angle 12 degrees; also a slope sunk on the west side, 150 feet long, angle 18 degrees, to develop the underlap.

COXE BROTHERS AND COMPANY, INCORPORATED

Beaver Meadow Colliery.—Inside. 975 feet of tunnel were driven to the north, a little east of the Beaver Meadow Slope No. 4. This tunnel penetrated the Bottom Split of the Gamma and the Buck Mountain veins, then crossed the invert and again passed through the Gamma and Buck Mountain veins. All of these veins were found in a workable condition and eight gangways had been started.

Another tunnel, 166 feet long, was driven to tap the Wharton in the basin. A gangway had been driven on the north side about 60 feet above the basin; a proving hole was sunk at the widest part of the basin and the elevation of the synclinal tested. Then the tunnel was driven and gangways started from which the coal to the south will be mined and finally robbed under protection of the 60 foot Chain Pillar to the North.

Slope No. 2, (Main Hoisting Slope).—The continuation of the drainage tunnel will be started, which will open the Virgin Mammoth vein in the Temperance basin and eventually drain the Jeanesville Spring Mountain workings through the Quakake tunnel.

At the old Evans Colliery near Beaver Meadow a washery is in course of construction and will be ready for operation in the near future. The work is under the supervision of Superintendent Smith and Foreman H. Grissinger.

Eighteenth District

SCHUYLKILL COUNTY

Pottsville, Pa., March 9, 1908.

Hon. James E. Roderick, Chief of Department of Mines:

Sir: I have the honor of transmitting herewith my annual report as Inspector of Mines for the Eighteenth Anthracite District, for the year ending December 31, 1907.

Respectfully submitted,

JOHN CURRAN,

Inspector.

SUMMARY OF STATISTICS

Number of collieries,	17
Number of mines,	37
Number of mines in operation,	37
Number of tons of coal shipped to market,	2,288,805
Number of tons used at mines for steam and heat,	356,725
Number of tons sold to local trade and used by employes,	28,242
Number of tons produced,	2,673,772
Number of tons produced by compressed air machines,	—
Number of tons produced by electrical machines,	—
Number of persons employed inside of mines,	4,313
Number of persons employed outside,	2,541
Number of fatal accidents inside of mines,	29
Number of fatal accidents outside,	7
Number of non-fatal accidents inside of mines,	73
Number of non-fatal accidents outside,	12
Number of tons of coal produced per fatal accident inside,	92.199
Number of persons employed per fatal accident inside,	149
Number of persons employed per fatal accident outside,	363
Number of persons employed per non-fatal accident inside,	59
Number of persons employed per non-fatal accident outside,	212
Number of wives made widows,	22
Number of children orphaned,	66
Number of steam locomotives used outside,	25
Number of compressed air locomotives used inside,	5
Number of electric motors used inside,	3
Number of fans in use,	29
Number of gaseous mines in operation,	23
Number of non-gaseous mines in operation,	14
Number of new mines opened,	9

TABLE A

PRODUCTION OF COAL

Names of Operators	Tons
Lehigh and Wilkes-Barre Coal Company,	695,938
Philadelphia and Reading Coal and Iron Company,	555,840
Mill Creek Coal Company,	552,055
Coxe Brothers and Company, Incorporated,	285,778
Dodson Coal Company,	171,517
Maryd Coal Company,	135,157
Truman M. Dodson Coal Company,	115,393
Phillips Brothers Coal Company,	47,369
East Lehigh Coal Company,	42,406
Campion and Gorman,	21,013
Port Carbon Coal Company,	14,266
Moss Glenn Coal Company,	13,287
William Cook,	8,753
William Greenfield, Jr.,	15,000
Total,	2,673,772

Production by Counties

Schuylkill,	2,673,772

TABLE B.—Fatal and non-fatal accidents inside and outside of mines; number of tons of coal produced per accident; number of persons employed; number employed per accident

Names of Operators	Fatal Accidents			Non-fatal Accidents			Tons of coal produced per fatal accident inside	Tons of coal produced per non-fatal accident inside	Number of employes inside	Number of employes outside	Total number of employes	Number of employes inside per fatal accident	Number of employes outside per fatal accident	Number of employes inside per non-fatal accident	Number of employes outside per non-fatal accident
	Inside	Outside	Total	Inside	Outside	Total									
Lehigh and Wilkes-Barre Coal Co.,	13	2	15	15	5	20	53,534	46,396	1,196	486	1,682	92	243	80	97
Philadelphia and Reading Coal and Iron Co.,	5	1	6	21	1	22	111,168	26,469	1,129	661	1,790	226	661	54	661
Mill Creek Coal Co.,	2	1	3	16	1	17	276,027	34,503	635	443	1,078	317	443	40	443
Coxe Brothers and Co., Incorporated,	2	2	4	4	3	7	142,889	71,444	362	251	613	181	125	90	83
Dodson Coal Co.,	2	....	2	4	2	6	85,758	42,879	292	178	470	146	....	73	89
Maryd Coal Co.,	2	....	2	5	....	5	67,578	27,031	346	201	547	173	....	69	....
Truman M. Dodson Coal Co.,	2	....	2	8	....	8	57,696	14,424	179	127	306	89	....	22	....
Campion and Gorman,	1	1	2	....	....	....	21,013	....	27	38	65	27	38	....	....
Miscellaneous companies,	....	....	....	....	....	....	....	....	147	156	303	....	....	....	....
Totals and averages for district,	29	7	36	73	12	85	92,199	36,627	4,313	2,541	6,854	149	363	59	212

TABLE C.—Classification of Fatal Accidents Inside and Outside of Mines

	Months													
	January	February	March	April	May	June	July	August	September	October	November	December	Totals	Percentages
Causes of Accidents Inside														
Falls of coal,	...	....	....	1	....	....	2	....	....	....	....	....	3	10.35
Falls of slate,	...	....	....	....	....	1	....	1	....	...	1	....	3	10.35
Mine cars,	...	....	....	1	....	1	....	....	1	....	....	....	3	10.35
Suffocation by gas, etc.,	...	....	....	....	....	....	9	....	....	....	....	....	9	31.03
Explosions of powder and dynamite,	...	....	....	....	....	1	....	....	....	....	....	....	1	3.44
Premature blasts,	1	....	....	....	....	1	....	....	1	...	....	....	3	10.35
Falling into shafts,	1	....	....	....	....	....	....	....	....	1	....	....	2	6.89
Falling into slopes, etc.,	...	....	1	1	....	....	....	....	....	....	....	....	2	6.89
Miscellaneous,	1	....	....	....	....	....	....	....	1	...	....	1	3	10.35
Totals,	3	....	1	3	....	4	11	1	3	1	1	1	29	100.00
Causes of Accidents Outside														
Cars,	...	1	....	....	....	....	1	....	....	...	....	2	4	57.14
Machinery,	...	....	....	....	....	1	....	....	....	...	....	....	1	14.29
Miscellaneous,	1	....	....	....	....	1	....	....	....	...	....	....	2	28.57
Totals,	1	1	....	....	....	2	1	....	....	...	....	2	7	100.00
Grand totals inside and outside,	4	1	1	3	....	6	12	1	3	1	1	3	36	

TABLE D.—Classification of Non-fatal Accidents Inside and Outside of Mines

	Months													
	January	February	March	April	May	June	July	August	September	October	November	December	Totals	Percentages
Causes of Accidents Inside														
Falls of coal,	...	....	....	2	....	....	1	1	1	2	....	1	8	10.96
Falls of slate,	...	1	....	....	....	....	1	1	....	...	1	....	4	5.48
Falls of roof,	...	....	2	2	....	1	....	....	....	...	2	1	8	10.96
Mine cars,	1	1	1	1	3	1	....	....	3	1	2	....	14	19.18
Explosions of gas and dust,	...	2	....	....	1	4	2	3	1	...	3	2	18	24.66
Explosions of powder and dynamite,	1	....	....	2	....	....	....	....	....	....	....	....	3	4.11
Premature blasts,	1	....	1	....	1	....	....	....	1	....	....	1	5	6.85
Falling into slopes, etc.,	...	....	....	....	....	....	....	....	1	....	....	....	1	1.37
Mules,	....	1	....	....	....	....	....	....	....	...	....	....	1	1.37
Miscellaneous,	...	1	1	2	....	1	....	1	3	....	2	....	11	15.06
Totals,	3	6	5	9	5	7	4	6	10	3	10	5	73	100.00
Causes of Accidents Outside														
Cars,	...	....	....	....	1	....	1	2	....	....	....	....	4	33.34
Machinery,	...	....	....	....	....	1	....	....	....	....	....	....	1	8.33
Miscellaneous,	...	1	1	....	1	....	....	....	1	2	....	1	7	58.33
Totals,	...	1	1	....	2	1	1	2	1	2	....	1	12	100.00
Grand totals inside and outside,	3	7	6	9	7	8	5	8	11	5	10	6	85	

TABLE E.—Occupations of Persons Killed or Fatally Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Inside													
Miners,	2	....	1	1	...	2	2	1	1	1	...	1	12
Miners' laborers,	...	....	....	1	...	1	....	....	1	....	1	....	4
Drivers and runners,	...	....	....	....	...	1	....	....	1	....	....	...	2
Company men,	1	....	....	....	....	....	....	....	....	....	....	....	1
All other employes,	...	....	....	1	...	....	9	....	....	....	....	....	10
Totals,	3	....	1	3	...	4	11	1	3	1	1	1	29
Outside													
All other employes,	1	1	...	....	...	2	1	....	....	....	....	2	7
Totals,	1	1	....	....	...	2	1	....	....	....	....	2	7
Grand totals inside and outside,	4	1	1	3	...	6	12	1	3	1	1	3	36

TABLE F.—Occupations of Persons Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Inside													
Mine foremen,	...	....	....	1	....	....	....	....	....	....	....	....	1
Fire bosses and assistants,	..	...	...	...	...	1	....	....	....	....	....	....	1
Miners,	2	4	4	4	2	1	2	2	6	2	4	2	35
Miners' laborers,	1	....	....	3	1	5	1	4	1	1	5	3	25
Drivers and runners,	...	1	....	....	1	...	....	....	1	....	1	....	4
Doorboys and helpers,	...	....	....	....	1	...	....	....	1	....	....	....	2
Company men,	....	1	1	....	....	....	1	....	1	....	....	....	4
All other employes,	....	....	....	1	....	....	....	....	....	....	....	....	1
Totals,	3	6	5	9	5	7	4	6	10	3	10	5	73
Outside													
Engineers and firemen,	....	1	....	....	...	...	....	....	....	....	....	....	1
Slatepickers (boys),	....	....	....	...	...	1	....	....	....	....	....	....	1
All other employes,	...	....	1	....	2	....	1	2	1	2	....	1	10
Totals,	...	1	1	...	2	1	1	2	1	2	....	1	12
Grand totals inside and outside,	3	7	6	9	7	8	5	8	11	5	10	6	85

TABLE G.—Nationality of Persons Killed or Fatally Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
American,	1	....	....	....	...	....	....	....	....	....	....	....	1
English,	....	....	....	1	....	....	....	....	....	....	....	....	1
Irish,	1	....	....	....	...	...	....	....	....	....	....	....	1
Polish,	1	....	....	....	....	2	2	....	....	....	1	1	7
Hungarian,	...	....	....	1	...	....	1	....	....	....	....	2	4
Italian,	...	1	...	...	...	1	9	....	....	1	....	....	12
Slavonian,	...	....	1	....	...	2	....	....	2	....	....	....	5
Lithuanian,	1	....	...	1	...	1	....	1	1	....	....	....	5
Totals,	4	1	1	3	....	6	12	1	3	1	1	3	36

TABLE H.—Nationality of Persons Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
American,	...	....	1	2	3	1	1	1	1	....	2	....	12
English,	...	....	....	....	...	....	....	....	1	....	....	....	1
Irish,	...	1	1	....	1	....	1	....	....	....	....	....	4
Polish,	1	3	....	4	1	4	2	5	1	....	3	....	24
Hungarian,	....	....	....	1	1	....	....	1	....	2	....	....	5
Italian,	...	....	....	....	....	1	....	....	1	....	....	1	3
Slavonian,	...	2	1	....	....	1	1	1	2	1	....	2	11
Lithuanian,	2	....	3	....	1	1	....	....	3	1	3	2	16
Austrian,	...	....	....	....	2	....	....	....	....	....	1	1	4
Russian,	...	1	....	....	....	...	....	....	....	1	1	....	3
Tyrolean,	....	....	...	....	...	....	....	...	2	....	....	....	2
Totals,	3	7	6	9	7	8	5	8	11	5	10	6	85

TABLE I.—Operators and mines, kind of openings, type and size of fans, size of furnaces, volume of air produced by fan or furnace per minute, number of splits of air currents, and number of persons employed inside

Names of Operators and Mines	Kind of opening	Gaseous or non-gaseous	Method of ventilation	Diameter of fan in feet	Width of blades in feet	Depth of blades in feet	Number of revolutions per minute	Water gauge developed—in inches	Name of fan	Power used	Number of splits of air currents	Number of cubic feet of air per minute entering the mine at inlet	Total quantity of air per minute circulating in all the splits in cubic feet	Number of persons employed inside
Lehigh and Wilkes-Barre Coal Co.														
Audenried Colliery:														
Audenried No. 11,	Slope,...	Gaseous,	Fan,.....	16	4 2-12	3 8-12	95	.8	Guibal, ...	Steam,.....	5	105,000	70,000	662
Audenried No. 16,	Slope,...	Gaseous,	Fan,.....	12	4	3.6	90	.7			2	49,000	40,000	
Audenried No. 21,	Slope,...	Non-gas.	Fan,.....	15	4.6	5	45	.4			2	39,000	30,000	
Honey Brook No. 5 Colliery:														
Honey Brook No. 15,	Slope,...	Gaseous,	Fan,.....	15	4.4	4.4	75	.8			4	59,300	50,000	300
Honey Brook No. 20,	Slope,...	Non-gas.	Fan,.....	8	2.10	2.3	65	.8			3	38,000	25,000	100
Green Mountain,	Slope,...	Non-gas.	Fan,.....	15	4.2	4.1	65	.7			4	40,450	30,000	100
Water Level Tunnel,	Drift,...	Non-gas.	Fan,.....	12	4	3.6	60	.5			2	25,000	15,000	34
Philadelphia and Reading Coal and Iron Co.														
Silver Creek Colliery:														
Silver Creek No. 1,	Shaft,...	Gaseous,	Fan,...	21	6	7	70	1.5	Guibal, ...	Steam,.......	8	99,595	67,250	269
Silver Creek No. 2,	Shaft,...	Gaseous,	Fan,...											
Eagle Hill Colliery:														
Eagle Hill,	Slope,...	Gaseous,	Fan,...	21	6	6.10	70	1.5	Guibal, ...	Steam,.......	8	70,000	52,200	174
Eagle Hill No. 2,	Shaft,...	Gaseous,	Fan,...											
Eagle Hill No. 3,	Drift,...	Non-gas.	Fan,.....	8	1.6	3	68	.6	Guibal, ...	Steam,.......	1	14,900	11,200	28
Eagle Hill No. 4,	Drift,...	Non-gas.	Fan,.....	12	4	3.6	70	.8	Guibal, ...	Steam,.......	2	17,300	12,000	30
Mill Creek Coal Co.														
Buck Mountain Colliery:														
Buck Mountain No. 1,	Slope,...	Gaseous,	Fan,....	16	4	4	80	1.1	Guibal, ...	Steam,.....	9	109,760	76,800	256
Buck Mountain No. 2,	Slope,...	Gaseous,												
Buck Mountain No. 3,	Slope,...	Gaseous,	Fan,.....	16	4	4	80	.7	Guibal, ...	Steam,.....				

Vulcan Colliery:														
Vulcan, ...	Slope,....	Gaseous,	Fans,..	25 16	8 8	6.3 4	62 50	1.8 .7	Guibal, ...	Steam,.......	15	124,800	75,060	278
Middle Lehigh Colliery:														
Middle Lehigh No. 1, ...	Slope,....	Non-gas.												
Middle Lehigh No. 3, ...	Slope,....	Gaseous,	Fan,....	16	4.5	4.1	33	.7	Guibal, ...	Steam,.......	5	63,500	37,500	150
Middle Lehigh No. 6, ...	Slope,....	Non-gas.												
Middle Lehigh No. 7, ...	Slope,....	Non-gas.												
Coxe Brothers and Co., Inc.														
Oneida Colliery:														
Oneida No. 1, ...	Shaft,....	Gaseous,	Fan,....	12.6	5.3	5.10	150	.7	Pelzer, ...	Steam,.......	10	73,950	60,360	150
Oneida No. 1, ...	Slope,....	Gaseous,												
Oneida No. 2, ...	Slope,....	Gaseous,							Guibal, ...	Steam,.......	....	10,000	6,900	20
Oneida No. 4, ...	Slope,....	Gaseous,	Fan,....	20	6	5.9	12	.2						
Oneida No. 3, ...	Slope,....	Non-gas.												
Oneida No. 3, ...	Shaft,....	Non-gas.	Fan,....	20	6	6.6	65	.5	Guibal, ...	Steam,.......	8	78,100	68,000	182
Oneida No. 5, ...	Slope,....	Non-gas.												
Oneida No. 6, ...	Slope,....	Non-gas,												
Dodson Coal Co.														
Morea Colliery:														
Morea No. 1, ...	Slope,...	Gaseous,	Fan,...	18 18	6.10 6.10	6 6	80 80	1 .9	Guibal, ...	Steam,.......	6	130,500	117,000	294
Morea No. 2, ...	Shaft,...	Gaseous,	Fan,.....	18	6.10	6	80	.5	Guibal, ...	Steam,.......	....	....	....	.....
Maryd Coal Co.														
Maryd Colliery:														
Maryd No. 1, ...	Slope,....	Gaseous,	Fan,.....	16	4	5	80	1.75	Guibal, ...	Steam,.......	3	40,500	16,900	88
Maryd No. 2, ...	Slope,....	Gaseous,	Fan,.....	18	6	5	70	1.75	Guibal, ...	Steam,.......	2	42,240	28,350	135
Maryd No. 3, ...	Slope,....	Gaseous,	Fan,....	16	4.3	4.9	80	1.80	Guibal, ...	Steam,.......	1	41,000	14,250	53
Maryd No. 4, ...	Shaft,....	Gaseous,												
Truman M. Dodson Coal Co.														
Kaska William Colliery:														
Kaska William, ...	Shaft,....	Gaseous,	Fan,...	16 22 4	4 6	5 5.10	65 68 220	.6 1.1 1.5	Guibal, ... Guibal, ... Guibal, ...	Steam,..... Steam,..... Steam,.....	6	81,860	46,540	179
Moss Glenn Coal Co.														
Moss Glenn Colliery:														
Moss Glenn, ...	Slope,....	Non-gas.	Fan,.....	10	3	3	100	1.5	Guibal, ...	Steam,.......	1	14,000	7,500	25

13 non-gaseous mines, natural ventilation, not included.

TABLE 1.—Operators, location of collieries, railroads, etc.

Names of Operators and Collieries	County	Name of General Superintendent	Post Office	Name of Superintendent	Post Office	Railroad to Mine
Lehigh and Wilkes-Barre Coal Co.						
Audenried No. 4, Honey Brook No. 5,	Schuylkill,	C. F. Huber,	Wilkes-Barre,	E. J. Newbaker,	Audenried,	C. R. R. of N. J.
Philadelphia and Reading Coal and Iron Co.						
Silver Creek, Eagle Hill,	Schuylkill,	W. J. Richards,	Pottsville,	Reese Tasker,	Pottsville,	P. and R.
Mill Creek Coal Co.						
Buck Mountain, Vulcan, Middle Lehigh,	Schuylkill,	T. D. Jones, General Manager,	New Boston,	J. E. Jones,	New Boston,	Lehigh Valley and Pa.
Coxe Brothers and Co., Inc.						
Oneida,	Schuylkill,	S. D. Warriner, General Manager,	Wilkes-Barre,	William H. Davis,	Hazleton,	Lehigh Valley
Dodson Coal Co.						
Morea,	Schuylkill,			Truman M. Dodson,	Morea,	Lehigh Valley and Pa.
Maryd Coal Co.						
Maryd,	Schuylkill,			George W. Wilmot,	Maryd,	C. R. R. of N. J. and P. and R.
Truman M. Dodson Coal Co.						
Kaska William,	Schuylkill,	Truman M. Dodson,	Morea,	Thomas F. Downing,	Kaska P. O.,	P. and R. and C. R. R. of N. J.
Phillips Brothers Coal Co.						
Silver Hill,	Schuylkill,	T. C. Reese,	Middleport,	T. C. Reese,	Middleport,	P. and R.
East Lehigh Coal Co.						
East Lehigh,	Schuylkill,	James Tinley,	Tamaqua,	James Tinley,	Tamaqua,	P. and R. and C. R. R. of N. J.
Campion and Gorman						
Bell,	Schuylkill,	D. J. Slattery,	Tuscarora,	D. J. Slattery,	Tuscarora,	P. and R.
Port Carbon Coal Co.						
Lucy C. R.,	Schuylkill,	D. J. Slattery,	Tuscarora,	D. J. Slattery,	Tuscarora,	P. and R.

Moss Glenn Coal Co. Moss Glenn,	Schuylkill,	William H. Greenfield,	2910 North American St., Philadelphia,	F. H. John,	Middleport,	P. and R.
William Cook Oakley,	Schuylkill,	William Cook,	Tuscarora,	William Cook,	Tuscarora,	P. and R.
William Greenfield, Jr. Pine Dale Washery,	Schuylkill,	F. H. John,	Tuscarora,			C. R. R. of N. J.

TABLE 2.—Number of tons of coal mined, number of days worked, number of persons employed, number killed and injured, quantity of powder and dynamite used, etc.

Names of Operators and Collieries	County	Number of tons of coal shipped to market	Number of tons used at collieries for steam and heat	Number of tons sold to local trade and used by employes	Total production of coal in tons	Number of days worked	Number of employes	Number of fatal accidents	Number of non-fatal accidents	Number of kegs of powder used	Number of pounds of dynamite used	Number of horses and mules
Lehigh and Wilkes-Barre Coal Co.												
Audenried No. 4,	Schuylkill,	344,312	37,580	3,179	385,071	241	868	15	12	6,352	129,044	78
Honey Brook No. 5,		283,629	27,238	....	310,867	253	748	....	8	1,703	146,405	54
							*66	....	....	....	....	......
Totals,		627,941	64,818	3,179	695,938	......	1,682	15	20	8,055	275,449	132
Philadelphia and Reading Coal and Iron Co.												
Silver Creek,	Schuylkill,	292,760	33,600	4,294	330,654	271	1,041	3	7	4,296	42,970	87
Eagle Hill,	Schuylkill,	188,303	34,839	2,044	225,186	280	674	3	15	1,392	61,403	64
Eagle Hill No. 2,							75	....	....	211	14,600	......
Totals,		481,063	68,439	6,338	555,840	......	1,790	6	22	5,899	118,973	151
Mill Creek Coal Co.												
Buck Mountain,	Schuylkill,	227,874	27,864	....	255,738	265	398	....	7	6,591	12,750	40
Vulcan,		188,644	21,900	....	210,544	261	390	1	6	6,128	13,805	39
Middle Lehigh,		70,993	14,780	....	85,773	167	290	2	4	1,635	8,925	31
Totals,		487,511	64,544	....	552,055	......	1,078	3	17	14,354	35,480	110
Coxe Brothers and Co., Inc.												
Oneida,	Schuylkill,	216,070	66,939	2,769	285,778	278	613	4	7	5,272	25,684	74
Dodson Coal Co.												
Morea,	Schuylkill,	144,484	26,280	753	171,517	224	470	2	6	1,075	19,540	51

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*Miscellaneous.

Maryd Coal Co. Maryd,	Schuylkill,	118,745	15,206	1,206	135,157	241	547	2	5	2,530	34,181	48
Truman M. Dodson Coal Co. Kaska William,	Schuylkill,	78,568	36,500	325	115,393	176	306	2	8	1,600	8,700	33
Phillips Brothers Coal Co. Silver Hill,	Schuylkill,	45,107	1,890	372	47,369	256	57	....	....	120	6,000	7
East Lehigh Coal Co. East Lehigh,	Schuylkill,	25,125	6,000	11,281	42,406	276	90	....	....	10	5,000	16
Campion and Gorman Bell,	Schuylkill,	19,663	1,300	50	21,013	230	65	2	....	300	7,000	8
Port Carbon Coal Co. Lucy C. R.,	Schuylkill,	12,663	900	703	14,266	163	60	....	....	25	6,000	4
Moss Glenn Coal Co. Moss Glenn,	Schuylkill,	9,703	2,920	664	13,287	241	54	....	....	360	720	12
William Cook Oakley,	Schuylkill,	7,562	589	602	8,753	196	22	....	....	200	1,500	4
William Greenfield, Jr. Pine Dale Washery,	Schuylkill,	14,600	400	....	15,000	......	20	....	....	....	....	1
Grand totals,		2,288,805	356,725	28,242	2,673,772	......	6,854	36	85	39,800	544,227	651

TABLE 2.—PART 2

Names of Operators	County	Number of Boilers					Locomotives			Number of steam engines of all classes	Total horse power	Number of pumps delivering water to surface	Capacity in gallons per minute	Quantity delivered to surface per minute—gallons	Number of electric dynamos	Number of air compressors
		Cylindrical	Horse power	Tubular	Horse power	Total horse power	Steam	Air	Electric							
Lehigh and Wilkes-Barre Coal Co.,	Schuylkill,	39	1,350	45	4,725	6,075	8	......	......	40	5,495	10	16,063	7,145	1	2
Philadelphia and Reading Coal and Iron Co.,		20	600	22	3,365	3,965	2	......	......	42	7,505	4	4,155	2,277	......	3
Mill Creek Coal Co.,		52	2,960	25	4,050	7,010	7	3	......	44	4,505	13	15,400	3,500	......	2
Coxe Brothers and Co., Incorporated,		24	880	25	3,200	4,080	4	2	......	36	3,550	9	7,600	4,600	1	4
Dodson Coal Co.,		......	......	19	2,430	2,430	......	......	3	18	1,200	5	10,540	10,540	1	......
Maryd Coal Co.,		......	......	10	1,600	1,600	2	......	......	21	2,140	3	1,600	900	......	1
Truman M. Dodson Coal Co.,		......	......	16	2,240	2,240	......	......	......	13	2,425	2	2,350	1,500	......	1
Phillips Brothers Coal Co.,		......	......	4	220	220	1	......	......	4	75	......	......	......	......	......
East Lehigh Coal Co.,		......	......	3	650	650	......	......	......	13	300	1	50	30	......	......
Campion and Gorman,		......	......	2	175	175	......	......	......	3	175	......	......	......	......	......
Port Carbon Coal Co.,		......	......	2	150	150	......	......	......	2	150	......	......	......	......	1
Moss Glenn Coal Co.,		......	......	5	230	230	......	......	......	4	130	2	700	250	......	......
William Cook,		......	......	2	120	120	1	......	......	3	176	......	......	......	......	......
William Greenfield, Jr.,		......	......	2	80	80	......	......	......	2	60	......	......	......	......	......
Totals,	......	135	5,790	182	23,235	29,025	25	5	3	245	27,886	49	58,458	30,742	3	14

TABLE 3.—Number of each class of employes inside and outside of mines

Names of Operators and Collieries	County	Inside											Outside									Grand total inside and outside
		Mine foremen	Assistant mine foremen	Fire bosses and assistants	Miners	Miners' laborers	Drivers and runners	Doorboys and helpers	Pumpmen	Company men	All other employes	Total inside	Superintendents	Foremen	Blacksmiths and carpenters	Engineers and firemen	Slate pickers (boys)	Slate pickers (men)	Bookkeepers and clerks	All other employes	Total outside	
Lehigh and Wilkes-Barre Coal Co.																						
Audenried No. 4, ...	Schuylkill,....	2	....	3	207	140	29	15	9	143	114	662	....	1	......	32	62	8	2	101	206	868
Honey Brook No. 5, ...		1	2	1	131	93	24	11	3	119	149	534	....	1	3	24	68	6	2	110	214	748
													3	4	14	1	......	......	......	44	*66	*66
Totals, ...	....	3	2	4	338	233	53	26	12	262	263	1,196	3	6	17	57	130	14	4	255	486	1,682
Philadelphia and Reading Coal and Iron Co.																						
Silver Creek, ...	Schuylkill,....	1	1	9	200	147	35	3	......	102	179	677	....	2	12	28	46	28	4	244	364	1,041
Eagle Hill, ...		1	1	6	123	106	16	3	4	91	101	452	....	3	11	28	43	15	3	194	297	749
Totals, ...	....	2	2	15	323	253	51	6	4	193	280	1,129	....	5	23	56	89	43	7	438	661	1,790
Mill Creek Coal Co.																						
Buck Mountain, ...	Schuylkill,....	1	1	3	110	63	25	1	2	20	16	242	....	1	8	30	14	67	3	33	156	398
Vulcan, ...		1	1	5	150	45	19	10	2	18	11	262	1	1	7	23	8	55	2	31	128	390
Middle Lehigh, ...		1	....	1	46	30	14	2	4	8	25	131	....	1	5	23	16	40	2	72	159	290
Totals, ...	....	3	2	9	306	138	58	13	8	46	52	635	1	3	20	76	38	162	7	136	443	1,078
Coxe Bros. and Co., Inc.																						
Oneida, ...	Schuylkill,.......	2	3	....	235	13	35	6	8	3	57	362	....	1	15	47	33	20	4	131	251	613
Dodson Coal Co.																						
Morea, ...	Schuylkill,.......	1	....	2	106	97	23	2	4	52	5	292	1	1	11	33	27	17	2	86	178	470

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*Miscellaneous.

TABLE 3.— Continued

Names of Operators and Collieries	County	Inside											Outside									Grand total inside and outside
		Mine foremen	Assistant mine foremen	Fire bosses and assistants	Miners	Miners' laborers	Drivers and runners	Doorboys and helpers	Pumpmen	Company men	All other employes	Total inside	Superintendents	Foremen	Blacksmiths and carpenters	Engineers and firemen	Slate pickers (boys)	Slate pickers (men)	Bookkeepers and clerks	All other employes	Total outside	
Maryd Coal Co. Maryd, ...	Schuylkill, ...	1	....	2	173	71	17	1	3	39	39	346	1	4	15	23	22	10	3	123	201	547
Truman M. Dodson Coal Co. Kaska William, ...	Schuylkill, ...	1	....	4	69	23	15	1	6	40	20	179	1	1	8	24	24	13	1	55	127	306
Phillips Brothers Coal Co. Silver Hill, ...	Schuylkill, ...	1	....	...	12	6	3	2	......	4	3	31	1	1	2	2	6	1	1	12	26	57
East Lehigh Coal Co. East Lehigh, ...	Schuylkill, ...	1	1	....	23	6	4	1	......	4	......	40	1	1	2	5	8	1	1	31	50	90
Campion and Gorman Bell, ...	Schuylkill, ...	1	....	....	18	1	4	1	......	2	......	27	1	1	2	3	7	......	1	23	38	65
Port Carbon Coal Co. Lucy C. R., ...	Schuylkill, ...	1	1	....	22	6	6	1	......	2	......	39	1	1	2	2	3	2	1	9	21	60
Moss Glenn Coal Co. Moss Glenn, ...	Schuylkill, ...	1	....	....	20	1	......	......	2	1	......	25	1	1	2	5	5	2	1	12	29	54
William Cook Oakley, ...	Schuylkill, ...	1	1	....	5	1	2	......	......	......	2	12	....	1	1	2	3	......	......	3	10	22
William H. Greenfield, Jr. Pine Dale Washery, ...	Schuylkill, ...	....	....	....	......	......	......	......	......	......	......	......	1	1	......	2	3	......	......	13	20	20
Grand totals, ...	....	19	12	36	1,650	849	271	60	47	648	721	4,313	13	28	120	337	398	285	33	1,327	2,541	6,854

TABLE 3.— PART 2

Names of Operators and Collieries	County	Number of Days Worked in Breaker												
		January	February	March	April	May	June	July	August	September	October	November	December	Total
Lehigh and Wilkes-Barre Coal Co.														
Audenried No. 4,	Schuylkill,	24	22	21	23	21	21	20	12	20	20	21	16	241
Honey Brook No. 5,		21	19	20	23	23	22	20	21	23	17	21	23	253
Philadelphia and Reading Coal and Iron Co.														
Silver Creek,	Schuylkill,	23	20	19	24	22	23	23	22	23	25	23	24	271
Eagle Hill,		25	21	19	24	25	24	23	23	24	26	22	24	280
Mill Creek Coal Co.														
Buck Mountain,	Schuylkill,	24	19	23	23	21	21	22	24	21	23	23	21	265
Vulcan,		25	22	24	24	23	20	21	20	19	21	21	21	261
Middle Lehigh,		18	19	19	20	14	....	....	....	14	21	21	21	167
Coxe Brothers and Co., Inc.														
Oneida,	Schuylkill,	25	21	22	24	24	22	24	24	21	24	23	24	278
Dodson Coal Co.														
Morea,	Schuylkill,	22	1	19	21	24	24	8	25	21	26	21	12	224
Maryd Coal Co.														
Maryd,	Schuylkill,	26	21	13	16	16	17	17	19	22	28	24	22	241
Truman M. Dodson Coal Co.														
Kaska William,	Schuylkill,	15	14	12	14	15	14	14	15	16	17	15	15	176
Phillips Brothers Coal Co.														
Silver Hill,	Schuylkill,	22	21	23	19	19	20	22	24	21	23	22	20	256
East Lehigh Coal Co.														
East Lehigh,	Schuylkill,	23	20	21	21	19	25	26	26	23	24	24	24	276
Campion and Gorman														
Bell,	Schuylkill,	10	17	16	21	23	23	22	19	18	24	20	17	230

TABLE 3.—PART 2—Continued

Names of Operators and Collieries	County	Number of Days Worked in Breaker												
		January	February	March	April	May	June	July	August	September	October	November	December	Total
Port Carbon Coal Co Lucy C. R.,	Schuylkill,	....	17	22	21	10	8	10	9	11	19	18	18	163
Mcss Glenn Coal Co. Moss Glenn,	Schuylkill,	22	20	24	20	6	20	18	20	21	24	24	22	241
William Cook Oakley,	Schuylkill,	25	21	17	19	21	15	20	....	....	15	21	22	196

TABLE 4.—Fatal accidents inside and outside of mines

Date of accident	Name of Person	Nationality	Occupation	Age	Married or single	Number of widows	Number of orphans	Name of Mine	County	Nature and Cause of Accident in Brief
Jan. 18	Michael Suolofski, ...	Polish,.......	Company laborer,	40	M	1	2	Vulcan, ...	Schuylkill,..	Instantly killed. While cleaning a car that was standing at an angle of 30 degrees over a shaft, he slipped and fell down the shaft.
18	Patrick Quirk, ...	American,...	Miner, ...	55	M.	1	....	Eagle Hill, ...		Fatally injured. He was working inside the battery repairing a chute when some fine dirt rushed down from the top part of the chute and pinned him behind the battery. He remained there for several hours before he was released. Accident occurred in chute No. 108, west top split.
21	Philip Boyle, ...	Irish,.........	Laborer, ...	30	S.	....	....	Bell, ...		Instantly killed. He was struck by the socket of the wire rope after it broke on the plane. Outside.
21	John Burkot, ...	Lithuanian,.	Miner, ...	35	M.	1	4	Kaska William, ...		Fatally injured by premature blast in West Skidmore gangway, No. 4 slope. He was tamping a rock hole charged with dynamite with an iron bar and it exploded prematurely.
Feb. 21	Joseph Marcutch, ...	Italian,......	Laborer, ...	28	S.	....	....	Audenried No. 4, ...		Instantly killed. He was struck by mine car running down the plane in No. 2 South Stripping, Tresckow colliery, without the rope being attached to it. Outside.
March 7	John Sinock, ...	Slavonian,...	Miner, ...	30	M.	1	1	Maryd, ...		Instantly killed at No. 3 slope, Diamond vein. He fired a blast at face of airway where he was driving up along slope in Diamond vein. He returned twenty minutes after firing and fell down the manway. Angle of dip 65 degrees.

TABLE 4.— Continued

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Number of widows	Number of orphans	Name of Mine	County	Nature and Cause of Accident in Brief
April	8	William Seymore, ...	English,.....	Driver boss,	52	M.	1	5	Oneida No. 1, ...	Schuylkill,..	Fatally injured. He was caught between the cab of mine locomotive and the leg on high side of gangway. He died from his injuries April 10 in the Hazleton Hospital. Accident occurred in No. 18 gangway, West Buck Mountain vein, No. 1 slope.
	12	Charles Olinsky, ...	Lithuanian,	Miner, ...	48	M.	1	4	Bell, ...		Killed. He was starting the battery of No. 11 breast, East Holmes vein, and fell down the chute. No person was working with him. He was found dead in the chute.
	22	Mike Hudock, ...	Hungarian,..	Laborer, ...	35	M.	1	5	Morea, ...		Instantly killed while robbing pillars between breasts 87 and 88, West Buck Mountain vein, No. 1 level. They had started to drive a chute through center of a pillar from Monkey heading and were up six feet. Hudock was sitting in the heading between the chute they had started and the old breast when the timber fell down letting the block of coal between chute and breast fall on him.
June	5	Andrew Kurilla, ...	Slavonian,..	Jig tender...	21	M.	1	....	Oneida, ...		Instantly killed by being caught and whirled around shaft of jigs that he was attending to in breaker. Outside.
	10	Alfred Marchired, ...	Italian,......	Laborer, (outside.)	36	M.	1	4	Middle Lehigh, ...		Fatally injured. He was rolling a piece of round timber from the bank to the mine truck when the skid he was rolling it on slipped off the track. The sudden drop caused the cant hook he was using to rebound and it struck him across the abdomen. He died from his injuries in the State Hospital at Ashland, June 14. Outside.

June	17	Thomas Yoursick, ...	Lithuanian,.	Miner, ...	40	M.	1	6	Audenried No. 4, ...	Schuylkill,..	Fatally injured by explosion of powder. He was preparing a charge of powder in the heading to take up into his breast, when, it is supposed, a spark fell off his lamp into the powder, causing the explosion. He was unable to tell what caused it and died the same day in the State Hospital at Hazleton. Accident occurred in stump heading, No. 38 breast, No. 5 lift, East Lykens vein, No. 16 slope.
	17	John Bothy, ...	Slavonian,...	Driver, ...	21	S.	....	....	Silver Creek, ...		Fatally injured. He was driving on the bottom of No. 3 plane when two loaded cars came down grade out of back switch. He attempted to jump on bumpers of front car but slipped and fell under the cars. He died on the way to the Pottsville Hospital.
	25	Patrick Rosebunt, ...	Polish,.......	Laborer, ...	41	M	1	4	Middle Lehigh, ...		Fatally injured. He was in the act of firing a blast and in putting fire to the squib he touched the powder, causing the blast to go off prematurely. Accident occurred in East Top split counter, north dip, Rock plane.
	27	Stephen Wydah, ...	Polish,.......	Miner, ...	31	M.	1	3	Eagle Hill, ...		Instantly killed by fall of top slate. It fell on him when he was starting a heading in pillar of No. 2 breast, East Top split.
July	11	Michael McAluse, ...	Italian,......	Laborer, ...	17	S.	....	....	Audenried No. 4, ...		Smothered by gas. In removing the water from No. 1 slope in No. 1 basin through drill holes from No. 4 level, Shoemaker went down to find out how much the water had receded since the time he visited it the day before. The water had gone down below the top in the basin, allowing the gas to come across the basin from the north dip. As the men went down after each other to find the cause of their delay they were overcome by the gas and died before they could be rescued.
	11	Carman Domania, ...	Italian,......	Laborer, ...	45	M.	1	5	Audenried No. 4, ...		
	11	John Domanio, ...	Italian,......	Laborer, ...	20	S.	....	....	Audenried No. 4, ...		
	11	Ralph Lukato, ...	Italian,......	Laborer, ...	50	M.	1	8	Audenried No. 4, ...		
	11	Frank Betulia, ...	Italian,......	Laborer, ...	28	M.	1	2	Audenried No. 4, ...		
	11	Nesty Shoemaker, ...	Italian,......	Laborer,.....	22	S.	....	....	Audenried No. 4, ...		
	11	James Leffando, ...	Italian,......	Pit boss, ...	35	M.	1	....	Audenried No. 4, ...		
	11	Frank Varrelly, ...	Italian,......	Laborer, ...	24	S.	....	....	Audenried No. 4, ...		
	11	Joseph Lucheno, ...	Italian,......	Laborer, ...	40	S.	....	....	Audenried No. 4, ...		
	17	George Szupnogis, ...	Polish,.......	Miner, ...	24	S.	....	....	Silver Creek, ...		Killed. He was about to stand a prop in the inside chute of breast No. 42, West Bottom split, No. 3 plane, when a piece of top coal fell on him.
	18	John Hyduke, ...	Hungarian,..	Top man, ..	37	M.	1	4	Audenried No. 4, ..		Fatally injured. He was top-man on plane at No. 2 S. B. stripping, Tresckow, and in reaching down to unhitch the chain from the car he fell on the track and the car ran over him. He died July 19. Outside.
	30	Stephen Macovitch, ..	Polish,.......	Miner, ...	28	S.	....	....	Audenried No. 4, ..		Killed by fall of slate at face of breast No. 47, West Buck Mountain vein, No. 1 basin, south dip.

TABLE 4.—Continued

Date of accident	Name of Person	Nationality	Occupation	Age	Married or single	Number of widows	Number of orphans	Name of Mine	County	Nature and Cause of Accident in Brief
Aug. 27	Michael Toncavage, ..	Lithuanian, .	Miner, ...	27	M.	1	3	Kaska William, ..	Schuylkill, ..	Killed. He was drilling a hole in the bottom coal at face of breast when a piece of dividing slate in the vein fell on him. Accident occurred in No. 10 breast, West Orchard vein, No. 2 shaft, north dip.
Sept. 9	Mathias Smith, ...	Lithuanian, .	Miner, ...	22	M.	1	....	Oneida, ...		Fatally injured. He tamped two holes and lighted the fuse of both, but only one hole exploded. He returned to see why the other hole did not explode, and just as he reached the hole the other fuse exploded. He died from his injuries the same day at the Hazleton Hospital. Accident occurred in No. 31 breast, No. 18 Buck Mountain gangway, No. 3 level.
17	Michael Powanda, ...	Slavonian, ...	Co. laborer,	25	S.	....	....	Morea, ...		Killed. A rush of fine culm that he was shoveling from the bottom of No. 1 breast in East Skidmore vein, No. 1 level, forced him down the chute to the battery and covered him. He was smothered before aid reached him.
21	John Habolla, ...	Slavonian, ...	Driver, ...	23	S.	....	....	Maryd, ...		Killed. He was caught between the frame of a door used for ventilating the gangway and a car that he was pulling out of the gangway. Accident occurred in No. 2 slope, West Primrose vein.
Oct. 22	Frank Troy, ...	Italian, ...	Rock-miner,	20	S.	....	....	Eagle Hill, ...		Killed. While ascending the shaft for the purpose of repairing the bell wire he stood on the edge of the bucket, lost his balance and fell down the shaft, a distance of 200 feet. Accident occurred in No. 2 coal shaft.

Nov.	26	Joseph Litstanski, ..	Polish, ...	Laborer, ...	32	M.	1	1	Audenried No. 4, ..	Schuylkill, ..	Killed. While shoveling coal into the chute at face of breast a piece of top slate fell on him. Accident occurred in breast No. 8, East Buck Mountain vein, No. 4 plane.
Dec.	4	Emro Torok, ...	Hungarian, ..	Laborer, ...	34	M.	1	4	Oneida, ...		Fatally injured. Was run over by railroad car. He was standing behind the car when a mine locomotive, pushing a trip of empty mine cars from an opposite direction struck the railroad car, moving it sufficiently to run over him. He was removed to the State Hospital at Hazleton, where one of his legs was amputated. He died December 6. Outside.
	19	Peter Gurish, ...	Hungarian, ..	Loco. patcher,	18	S.	....	....	Honey Brook, ...		Fatally injured. While holding a piece of T iron rail to the bumper of a stripping car that was off the track for the locomotive to push it, the engine pressed against the rail and it slipped off the face of the bumper, which was covered with iron. This brought the engine with some force up against the car. Gurish could not get out of the way and was caught between the bumpers. He was taken to the State Hospital at Hazleton and died the same day. Outside.
	21	Anthony Savatuski, ..	Polish, ...	Miner, ...	38	M.	1	1	Audenried No. 4, ..		Killed. He was carried down the manway by a rush of water from a tunnel he had broken into at face of breast No. 22, East Lykens, No. 4 level, No. 1 basin.

TABLE 5.—Non-fatal accidents inside and outside of mines

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Name of Mine	County	Nature and Cause of Accident in Brief
Jan.	14	Ignatz Summonavage,	Lithuanian,	Miner,	32	M.	Morea,	Schuylkill,	Face and hands burned by powder in first breast heading. A spark fell off his naked lamp into a cartridge that he was filling with black powder.
	21	Charles Rolenitus,	Lithuanian,	Laborer,	30	S.	Kaska William,		Head and body cut. He was assisting the miner to tamp a rock hole at face of West Skidmore gangway, No. 4 slope, when the shot exploded.
	26	Walter Butrimavage,	Polish,	Miner,	30	S.	Vulcan,		Body squeezed by being caught between frame of door and mine car on gangway.
Feb.	4	John Bruly,	Russian,	Driver,	18	S.	Audenried No. 4,		Collar bone broken. Mule caught him against the stall in stable in No. 15 slope, No. 1 level.
	9	George Connors,	Irish,	Bottom man,	45	M.	Vulcan,		Knee injured by being caught between the bumpers of empty trip of mine cars on bottom of slope at No. 6 level.
	11	Paul Welcavish,	Polish,	Miner,	29	M.	Kaska William,		Leg bruised. Collar of a set of timber he was standing at face of gangway fell on him.
	14	Peter Washko,	Slavonian,	Fireman,	42	M.	Oneida,		Shoulder blade broken. In coming down off the top of boilers where he was fixing a steam joint he slipped and fell. Outside.
	19	Frank Garrush,	Polish,	Miner,	30	S.	Eagle Hill,		Hands and face burned by gas. He opened and took off the gauze of his safety lamp at face of breast and ignited the gas. Accident occurred in breast No. 118, West Skidmore vein.
	19	Mike Garrush,	Polish,	Miner,	37	S.	Eagle Hill,		Hands and face burned by gas. He opened his safety lamp at face of breast and ignited the gas. Accident occurred in breast No. 118, West Skidmore vein.

Feb.	20	Andrew Mazar, ...	Slavonian,...	Miner, ...	45	M.	Buck Mountain, ..	Schuylkill,..	Body injured. A piece of slate fell on him at face of breast. Accident occurred in breast No. 15. West Top split, Mammoth vein, No. 4 level.
March	4	William Mattelovitch,	Lithuanian,.	Miner, ...	46	M.	Maryd, ...		Ribs fractured. A piece of roof fell on him at face of gangway. Accident occurred at face of gangway West bottom split, No. 1 slope, 3rd level.
	5	Thomas Bloss, ...	Lithuanian,.	Miner, ...	46	M.	Vulcan, ...		Leg broken. A piece of coal rolling down the breast struck him. Accident occurred in breast No. 23, east 7 Foot vein, No. 4 level.
	6	James Rodgers, ...	American,...	Bottom man, ...	25	S.	Middle Lehigh, ...		Body bruised. Caught between timber and mine car at bottom of No. 3 slope.
	21	Manus Gallagher, ...	Irish,.........	Machine man, ...	33	M.	Honey Brook No. 5,		Compound fracture of ribs. Fell off scaffold he was working on, repairing a steam line. Outside.
	26	Stiney Beywrousky,..	Lithuanian,.	Miner, ...	39	S.	Kaska William, ...		Back injured. A piece of roof fell on him at face of breast No. 3, West Orchard vein, North dip.
	28	Andrew Chernitsky,..	Slavonian,...	Miner, ...	30	M.	Honey Brook No. 5,		Face and head cut and eyes injured by blast. After lighting fuse he stayed too long; flying coal struck him. Accident occurred in the heading in the chutes of East Lykens vein, No. 1 slant, No. 15 slope.
April	10	William McAnany, ..	American,...	Loader boss, ...	33	S.	Silver Creek, ...		Leg broken. Caught between the spreader of a team of mules he was driving and a mine car in West Top split gangway, No. 1 plane.
	11	Florence Eabert, ...	Austrian,....	Miner, ...	38	S.	Buck Mountain, ...		Leg fractured. A piece of roof fell on him at face of breast No. 33, 3rd West bottom split, Mammoth vein.
	13	Suduick Elex, ...	Polish,.......	Laborer, ...	23	S.	Audenried No. 4,		Hands, face and body burned. Elex lit loose powder on top of a box containing a full keg of powder. The powder in the keg exploded, burning them severely. Occurred in West Lykens vein, gangway No. 3 slope.
	13	Gavin Mike, ...	Polish,.......	Laborer, ...	32	M.			
	13	Terpold Flain, ...	Austrian,....	Miner, ...	37	M.	Oneida No. 3, ...		A piece of coal fell on him at face of breast No. 15, No. 8 East gangway, No. 5 slope, Buck Mountain vein.
	13	George Meneely, ...	American,...	Mine foreman, ...	49	M.	Maryd, ...		Foot badly contused. Caught between the bucket in shaft and timber while ascending the shaft.
	16	Thomas Kaper, ...	Hungarian,..	Laborer, ...	31	M.	Audenried No. 4, ...		Body injured. A piece of roof fell on him at face of breast. Accident occurred in 2nd level, No. 1 slope.
	23	Anthony Bogden, ...	Polish,.......	Miner, ...	38	S.	Silver Creek, ...		Ankle broken. A piece of coal rolled down the chute of his breast and struck him. Accident occurred at bottom of breast No. 77, No. 3 plane, West top split.

TABLE 5.—Continued

Date of accident	Name of Person	Nationality	Occupation	Age	Married or single	Name of Mine	County	Nature and Cause of Accident in Brief
April 29	Charles Yatkoptky,	Polish,	Miner,	35	M.	Buck Mountain,	Schuylkill,	Back and hip broken. Returned to face of breast after firing a blast and the top coal fell on him. Accident occurred at face of breast No. 19, No. 4 West top split, Mammoth vein, North dip.
May 3	John Sill,	Hungarian,	Laborer,	30	M.	Audenried No. 4,		Finger cut off. Caught in chain block pulley while unloading machinery. Outside.
7	William Wetcavage,	Lithuanian,	Laborer,	22	S.	Vulcan,		Face and hands burned by gas. Left his naked lamp on the platform and went up in the chute and brushed the gas down on it. Accident occurred in No. 4 chute, No. 6 lift, West Buck Mountain gangway.
18	Anthony Kartishipki,	Polish,	Miner,	35	M.	Silver Creek,		Hand shot off and side of face injured. He was firing dynamite on a piece of rock in manway of breast, No. 10 West bottom split, No. 4 plane, and it exploded prematurely.
18	Michael Kelley,	American,	Patcher,	17	S.	Honey Brook No. 5,		Leg fractured. While crossing the slope from No. 1 East Buck Mountain gangway to No. 1 East counter a loaded car which was being hoisted at the time jumped off the track and caught him. Accident occurred on No. 20 slope.
24	James Kennady,	American,	Driver,	21	S.	Maryd,		Rib broken and chest bruised. Caught between mine car and chute in East bottom split gangway, No. 2 slope.
25	Timothy Burke,	Irish,	Miner,	58	M.	Vulcan,		Body squeezed. Caught between mine car and chute. Accident occurred on No. 2 West 7 Foot gangway.
29	Patrick Murphy,	American,	Top man,	40	M	Eagle Hill,		Arm broken. Caught between the bumpers of mine car on top of slope. Outside.

June	12	Patrick Kelley,	American,	Fire boss,	43	M.	Silver Creek,	Schuylkill,	Hands and face burned by gas. A fall of coal from over the timber on the gangway brought the gas down on their naked lamps. Accident occurred in West Middle split gangway, No. 4 plane, between Nos. 4 and 5 breasts.
	12	John Unavage,	Polish,	Miner,	26	S.	Silver Creek,		
	12	Peter Sheares,	Polish,	Laborer,	26	S.	Silver Creek,		
	12	John Fergil,	Polish,	Laborer,	28	M.	Eagle Hill,		
	15	John Forish,	Slavonian,	Slatepicker,	15	M.	Honey Brook No. 5,		Leg fractured and lacerated. Caught in sprocket wheel of jig in breaker. Outside.
	27	John Matinko,	Polish,	Laborer,	41	M.	Eagle Hill,		Back hurt. A piece of roof fell on him at face of breast No. 2, East top split.
	27	George Yourres,	Lithuanian,	Laborer,	31	M.	Kaska William,		Eye injured. A steeple he had driven into a piece of timber to carry it slipped out and struck him in the eye. Accident occurred on West bottom split gangway, No. 4 slope.
	29	Anthony Donnedy,	Italian,	Laborer,	24	S.	Audenried No. 4,		Ribs fractured. He tripped and fell under an empty mine car while it was in motion. Accident occurred in tunnel between No. 4 level and No. 4 slope.
July	17	Stiney Vincent,	Polish,	Miner,	45	M.	Kaska William,		Hands and face burned by gas. Went to face of breast with a naked lamp on his head. Accident occurred in West top split, No. 2 shaft.
	25	Mike Gruel,	Polish,	Laborer,	20	S.	Maryd,		Compound fracture of the leg. A piece of slate slipped from upper side of gangway at face. Accident occurred in West Skidmore gangway, No. 1 slope.
	29	Louis Daily,	Italian,	Laborer,	25	S.	Middle Lehigh,		Leg cut. After giving signal to engineer to move car on the end of stripping bank he stood in front of it and the wheels ran over his leg. Outside.
July	30	William Richmond,	American,	Timberman,	48	M.	Buck Mountain,		Foot broken. He was taking down some loose coal from over the timber at bottom of slope when a piece fell on him. Accident occurred at bottom of No. 1 slope, No. 2 level.
	30	Edward Higgens,	Irish,	Miner,	40	S.	Eagle Hill,		Hands and face burned by gas. After firing a blast in breast and going down to gangway to eat his dinner he returned with an open lamp on his head and ignited the gas. Accident occurred in West Holmes vein.
Aug.	9	Frank Godavage,	Polish,	Miner,	50	M.	Eagle Hill,		Hands and face burned by explosion of gas. They were working at face of gangway with open lamps and ignited the gas. Accident occurred in West Big vein gangway.
	9	Joseph Covolosky,	Polish,	Laborer,	30	S.			
	9	Anthony Barashefsky,	Polish,	Laborer,	23	S.			
	12	Simon Tomalouis,	Polish,	Laborer,	29	M.	Eagle Hill,		Fingers smashed and had to be amputated. He was sitting on top of the slope, waiting to go down to his work and put his hand between the sheave and rope while it was in motion. Accident occurred on top of slope.

TABLE 5.—Continued

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Name of Mine	County	Nature and Cause of Accident in Brief
Aug.	13	Andrew Stupie,	Slavonian,	Miner,	39	M.	Eagle Hill,	Schuylkill,	Leg broken. A piece of slate fell on him at face of heading in West Skidmore vein.
	13	Paul Mazern,	Polish,	Laborer,	34	M.	Silver Creek,		Leg broken. A piece of coal fell off low side of gangway at face and struck him. Accident occurred in Water level gangway East Buck Mountain vein.
	13	Patrick McGrady,	American,	Loco. patcher,	21	S.	Audenried No. 4,		Large toe crushed. Caught between bumpers of mine car and engine. Outside.
	30	Mike Lason,	Hungarian,	Top man,	19	S.	Honey Brook No. 5,		Foot bruised. He was taking off the coupler from between two mine cars in motion; slipped and fell under the wheels. Occurred on top of No. 20 slope. Outside.
Sept.	9	Joseph Koniskoski,	Polish,	Doorboy,	17	S.	Middle Lehigh,		Leg broken. Slipped and fell under mine car while in motion. Accident occurred on West 7 foot first level, No. 3 slope.
	12	Stiney Youconsky,	Lithuanian,	Miner,	35	S.	Buck Mountain,		Foot crushed. While pushing coal down the chute a piece of rock slipped down and caught his foot. Breast No. 6, No. 3 level, East top split.
	12	John Bunicas,	Lithuanian,	Miner,	38	M.	Audenried No. 4,		Jaw bones and ribs fractured. In opening his breast from monkey heading a rush of coal from high side partially covered him. Accident occurred in No. 12 breast, West Lykens No. 3 slope, No. 1 basin.
	12	Dominic Buscavitch,	Lithuanian,	Miner,	45	M.	Audenried No. 4,		Two ribs broken by a rush of coal from high side of monkey heading in breast No. 12, West Lykens vein, No. 3 slope, No. 1 basin.

Sept.	13	John Spider,	Slavonian,	Miner,	50	M.	Audenried No. 4,	Schuylkill,	Leg fractured and body badly contused. In undermining the top coal in face of gangway it fell on him. Accident occurred in No. 1 slant gangway, No. 4 plane, West Lykens vein.
	19	Robert Harris,	English,	Miner,	25	S.	Morea,		Leg lacerated. The driver was absent from work and the miner undertook to do the driving and was caught between the cars. Accident occurred in East Mammoth vein, No. 1 level.
	19	Angelo Natula,	Italian,	Laborer,	30	S.	Morea,		Compound fracture of leg. A piece of rock rolled down the face of stripping and struck him. Accident occurred in Delano stripping. Outside.
	19	John Elick,	Slavonian,	Timberman,	37	M.	Oneida No. 1,		Leg, arm and ribs broken. He was lowered down an empty breast, No. 77, No. 17 East Buck Mountain gangway, No. 1 level, on a rope to recover a tape he let drop, and when coming back the rope broke and he fell forty feet. Angle of dip 45 degrees.
	24	Richard Breda,	Tyrolean,	Miner,	25	S.	Buck Mountain,		Body injured. He was tamping a hole containing dynamite with an iron bar when it exploded prematurely. Accident occurred in No. 17 counter, East bottom split, Mammoth vein.
	25	Anthony Sulfines,	Tyrolean,	Laborer,	24	S.	Buck Mountain,		Hands and face burned by gas. He went up in inside chute, not holed, with a naked lamp. Accident occurred in West Skidmore chutes, No. 5 level.
	25	David Williams,	American,	Driver,	22	S.	Morea,		Foot cut. In getting off the cars while in motion he slipped and the wheel ran over his foot. Accident occurred in East Mammoth vein gangway, No. 1 level.
Oct.	15	Mike Labbons,	Hungarian,	Screen tender,	17	S.	Oneida,		Large toe smashed. A piece of iron fell on it in the breaker. Outside.
	15	Frank Unista,	Hungarian,	Laborer,	23	M.	Morea,		Leg broken. A piece of rock rolled down the face of stripping and struck him. Outside.
	25	Anthony Powaltes,	Lithuanian,	Miner,	46	M.	Vulcan,		Rib broken. In his haste to get an empty car to load it he ran in the gangway and collided with the car he was going for. Accident occurred in No. 5 West Skidmore gangway, opposite No. 15 breast.
	28	Andrew Byuse,	Slavonian,	Miner,	45	M.	Oneida No. 1,		Hip injured. A piece of coal fell off the pillar of breast and struck him. Accident occurred in breast No. 27, No. 3 West Mammoth vein.

TABLE 5.—Continued

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Name of Mine	County	Nature and Cause of Accident in Brief
Oct.	28	Martin Osovich,	Russian,	Laborer,	29	S.	Honey Brook No. 5,	Schuylkill,	Fractured hip. A fall of coal from high side of gangway at the face struck him. Accident occurred in East Lykens gangway No. 3, No. 20 slope.
Nov.	8	John Tomalavage,	Lithuanian,	Miner,	40	M.	Kaska William,		Hands and face burned by gas. **He was** repairing the gangway and in driving fore-poles over the timber a rush of coal brought gas down on his open lamp. Accident occurred in West Mammoth vein gangway, No. 2 slope.
	8	William Tomalavage,	Lithuanian,	Laborer,	40	M.	Kaska William,		Hands, face and body burned by gas in West Mammoth vein gangway, No. 2 slope.
	8	Anthony Polites,	Lithuanian,	Laborer,	37	M.	Kaska William,		Hands, face and body burned by gas in West Mammoth vein gangway, No. 2 slope.
	11	Joseph Widzesleska,	American,	Laborer,	22	M.	Oneida,		Arm cut. A piece of roof fell on him in breast No. 17, West Buck Mountain.
	16	Joseph Dominzki,	Polish,	Laborer,	40	M	Middle Lehigh,		Neck and spine injured. Caught between mine car and overhead pulley in slope. Accident occurred on No. 3 slope.
	16	George Krippin,	Russian,	Miner,	34	M.	Audenried No. 1,		Leg fractured. In putting in a pulley on No. 21 slope the hoisting rope swung to one side and struck him.
	21	Anthony Buncuski,	Polish,	Miner,	49	M.	Eagle Hill,		Leg broken. A piece of slate fell on him while robbing pillars on East Middle split gangway.
	27	James Fogerty,	American,	Driver,	25	S.	Honey Brook No. 5,		Fracture of small bone in leg and lip cut. He fell off the front of a trip of cars while in the act of unhitching his two mules. Accident occurred in No. 20 slope, No. 3 East Skidmore gangway.

Nov.	27	Joseph Yonafski,	Polish,	Miner,	35	S.	Audenried No. 4,	Schuylkill,	Thigh crushed. He was barring down a piece of clod at face of breast when it fell on him. Accident occurred in breast No. 16, West Gamma vein, South dip.
	29	Serenna Marcana,	Austrian,	Laborer,	30	M.	Morea,		Foot badly lacerated. He was standing in front of No. 19 chute, East Skidmore vein, after firing a shot, when a piece of coal rolled down and struck him on instep.
Dec.	3	Anthony Phillip,	Lithuanian,	Laborer,	30	M.	Eagle Hill,		Hands and face burned by gas. Phillip uncovered his safety lamp to light fuse to fire blast and ignited the gas. Accident occurred on West bottom split, No. 4 section.
	3	Michael Stank,	Lithuanian,	Laborer,	25	S.			
	9	John Hanshick,	Slavonian,	Laborer,	25	S.	Maryd,		Small bones in left foot broken. A piece of roof fell on him in West Buck Mountain gangway, No. 1 slope, No. 2 level.
	11	Michael Trendo,	Italian,	Miner,	36	M.	Eagle Hill,		Leg broken by a fall of coal at face of breast No. 8, Big Diamond vein in drift No. 4.
	14	Michael Slvick,	Slavonian,	Laborer,	46	M.	Oneida,		Shoulder dislocated. In getting into a box car under the breaker his foot slipped, putting the strain on the arm he was holding with. Outside.
	17	Joseph Palko,	Austrian,	Miner,	29	M.	Honey Brook No. 5,		Hands, face and eye injured. He was drilling out a missed hole charged with dynamite, when it exploded. Accident occurred in No. 20 slope, East Lykens vein, No. 16 breast.

FATAL ACCIDENTS

Smothered by Gas

July 11, Honey Brook Slope, No. 1 basin, James Leffando, pit boss, Ralph Lukatz, Joseph Lucheno, Michael McAluse, Carman Domanio, John Domanio, Frank Varrelly, Frank Betulia and Nesty Shoemaker, Italian, laborers, working on the stripping in No. 1 basin, died from inhaling carbonic oxide gas near the bottom of old No. 1 Honey Brook slope in No. 1 basin.

The slope has been pretty well filled with water for several years on account of mine fires in No. 2 and No. 3 slopes in the same basin and all three slopes were connected by gangways. The mine officials, after silting the old workings and allowing the water to rise to such a height as they thought would be sufficient to exclude the air from that portion of the mine where the fire originated, and after leaving it stand twelve or fourteen years, came to the conclusion that the fire was extinguished and decided to remove the water from No. 1 basin. To accomplish this, they drove a tunnel from the south dip of the Buck Mountain vein on the fourth level of No. 4 Audenried slope. This tunnel was driven from the Buck Mountain vein to the Gamma vein, a distance of 64 feet. The tunnel was continued from Gamma vein toward the Wharton vein and when driven 60 feet, it was stopped and three drill holes were bored to tap the water from the face of the tunnel, one 39 feet, one 42 feet and one 45 feet; diameter of holes 3 inches vertical; height of water at this point 80 feet. When the water began to recede, Nesty Shoemaker, one of the laborers on the stripping, went down every morning in the old No. 1 slope to measure the fall of the water and report the result of his work to the mine officials. He usually asked some person to go with him and the morning the accident occurred he asked John Domanio. They went down and remaining longer than usual, the pit boss, Leffando, ordered Varrelly and Betulia to go and see why Shoemaker and Domanio had not returned to their work. They went down and when they failed to return, Leffando, Lucheno and Lukatz went down to search for the four men who had preceded them. They also failed to return, and McAluse, Carman Domanio and Pelauch went down and found Leffando, Lucheno and Lukatz overcome by the gas. Pelauch was able to return and give the alarm, but McAluse and Carman Domanio fell and died with the rest of the men. The first four men had reached the water, a distance of 290 feet from the top of the slope. The rest of the men only reached 240 feet or fifty feet from the water. The slope is 300 feet deep on a dip of from 12 to 15 degrees south. Since the accident occurred they have found no evidence of fire in the old Bull slope on the North dip and nearly opposite No. 1 slope on the south dip. When this water was sufficiently lowered in the basin, it permitted the white damp that was generated from the fire in the old Bull slope to cross the basin and come over to No. 1 slope. If these men had had any knowledge of the nature of the gas, they might have been able to detect it before so many were lost, but seeing the lamps of the men who preceded them burning brightly, they were deceived and walked into the gas without suspecting danger.

CONDITION OF COLLIERIES

LEHIGH AND WILKES-BARRE COAL COMPANY

Audenried No. 4 Colliery—Ventilation and drainage good.
Honey Brook No. 5 Colliery.—Ventilation and drainage good.

PHILADELPHIA AND READING COAL AND IRON COMPANY

Silver Creek Colliery.—Ventilation and drainage good.
Eagle Hill Colliery.—Ventilation and drainage good.

MILL CREEK COAL COMPANY

Buck Mountain Colliery.—Ventilation fair, drainage poor.
Vulcan Colliery.—Ventilation fair, drainage poor.
Middle Lehigh Colliery.—Ventilation and drainage fair.

COXE BROTHERS AND COMPANY, INCORPORATED

Oneida Colliery, No. 1 Slope workings.—Ventilation and drainage fair.
Nos. 2 and 4 Slopes.—Ventilation and drainage good.
No. 3 Slope.—Ventilation and drainage good.

DODSON COAL COMPANY

Morea Colliery.—Ventilation and drainage good. The removal of the steam locomotives from the mines has greatly improved the ventilation.

MARYD COAL COMPANY

Maryd Colliery.—Ventilation and drainage good.

TRUMAN M. DODSON COAL COMPANY

Kaska William Colliery.—Ventilation and drainage fair.

PHILLIPS BROTHERS COAL COMPANY

Silver Hill Colliery.—Ventilation and drainage fair. New fan now being built at the colliery will make great improvement in the ventilation.

EAST LEHIGH COAL COMPANY

East Lehigh Colliery.—Ventilation and drainage good.

WILLIAM COOK

Oakley Colliery.—Ventilation and drainage fair.

CAMPION AND GORMAN

Bell Colliery.—Ventilation good, drainage fair.

MOSS GLENN COAL COMPANY

Moss Glenn Colliery.—Ventilation and drainage fair.

IMPROVEMENTS

PHILADELPHIA AND READING COAL AND IRON COMPANY

Eagle Hill Colliery No. 1.—A tunnel from the fourth lift bottom to Primrose slope was completed to the Orchard vein a distance of 150 feet. This is the continuation of the old back switch.

An air tunnel from west Primrose gangway, 5th lift to the Skidmore vein, was driven a distance of 785 feet, cutting the Holmes vein, Top Split and Bottom Split veins.

A water level drift is now being driven on the south dip Primrose vein, and a tunnel has been completed at a distance of 140 feet to the Holmes vein.

A water level drift is now being driven on the Primrose north dip and a tunnel has been completed south at a distance of 35 feet to the Holmes north dip, and a tunnel completed north for a distance of 108 feet to the Orchard vein.

A water level drift is now being driven on the Diamond vein and a tunnel completed at a distance of 80 feet to the Little Diamond vein.

The Primrose air shaft has been sunk from the fourth lift Primrose vein 300 feet to the Top Split vein.

Eagle Hill Colliery.—The main tunnel mentioned in last year's report has been completed at a distance of 945 feet to the Buck Mountain vein, cutting the Four Foot, Top Split, Bottom Split and Skidmore veins.

A pair of 28x48 inch direct acting engines, with conical drums, has been erected.

An air hole was driven on Skidmore vein 400 feet connecting Nos. 1 and 2 Collieries.

Silver Creek Colliery.—A tunnel on No. 4 plane level from Top Split to the Holmes vein has been completed a distance of 350 feet.

The tunnel mentioned in last year's report on the shaft level from East Bottom Split to Mammoth to Middle Split of Mammoth was completed at 130 feet.

A landing in the coal shaft was completed on No. 3 plane level connected by a tunnel 380 feet long to the Holmes-Primrose tunnel.

The tunnel on No. 3 plane mentioned in last year's report from South Skidmore north dip to Skidmore south dip, through Windy Harbor basin, was finished at 565 feet to the Seven Foot vein. Windy Harbor water will be tapped from this tunnel by a diamond drill hole.

A water level drift is being driven on Orchard vein and a tunnel started north to the Top Split vein, cutting north and south dips of Primrose and South dip Holmes veins; tunnel driven 500 feet.

A water level drift is being driven on the Bottom Split of the Mammoth and a tunnel driven north to Skidmore at 50 feet.

A water level drift is being driven on the Buck Mountain vein.

A self-acting plane and locomotive road has been completed, carrying coal from water level drifts to breaker.

A new electric plant, with a 55 K. W. direct current generator, has been installed.

A new electrically driven box car loader installed, connected with a 50 H. P. motor.

LEHIGH AND WILKES-BARRE COAL COMPANY

Audenried No. 4 Colliery.—Second opening and air shaft combined at No. 21 slope, Treskow, complete with 15 foot fan and engine.

No. 21 slope sunk to third lift, and first and second lifts opened.

Tunnel—Buck Mountain to Lykens, second lift No. 21 slope.

Power plane driven in Gamma vein, middle basin, No. 4 slope, and operated by a pair of 14x18 inch friction engines located on the surface, the rope passing through a six inch bore hole.

No. 3 inside slope and plane driven across pitch in the Lykens Valley vein, No. 1 basin completed to plane level, operated by a pair of 14x20 inch engines located on the surface, the rope passing through a six inch bore hole.

Drainage tunnel and bore hole Gamma to Wharton, No. 1 basin.

Tunnel—Lykens to Buck Mountain plane level, No. 3 inside slope.

Tunnel—Buck Mountain to Lykens 5th lift, No. 16 slope.

New hoisting and boiler plant at No. 9 stripping. Engines 13x18 inches.

New hoisting plant at No. 7 stripping. Engines 13x18.

Ash conveyor No. 4 boiler plant.

No. 2 inside slope Middle basin sunk another lift.

No. 4 inside slope, shaft basin sunk 700 feet.

Honey Brook No. 5 Colliery.—New steam shovel plant installed at No. 8 west stripping.

No. 22 slope sunk to first lift in Wharton vein old No. 3 slope workings. Slope equipped with pair of 13x18 inch engines.

Gamma slope sunk to the basin at Green Mountain.

No. 20 slope in Lykens vein sunk to third lift.

MILL CREEK COAL COMPANY

Buck Mountain Colliery.—The tunnel on the fifth level from the Buck Mountain vein north dip, cutting the Skidmore vein on the north dip, was continued to the bottom split of Mammoth vein, north dip, and completed at a total distance of 694 feet.

A plane gangway driven in the spoon of the top split of Mammoth vein from the fourth level was completed during the year; total length, 1800 feet. A hoisting engine has been placed above the third level operated by compressed air. The loaded mine cars are dropped to the third level at present, and the empty cars hoisted by this engine.

In the third level, west top split of Mammoth vein, a self-acting plane was installed and gangways driven east and west from the head of the plane.

In the third level, bottom split of Mammoth vein, another self-acting plane was installed on account of the heavy grades for mule haulage.

In the seventh level a new slope has been started to be sunk to the basin of the Buck Mountain vein, and a pair of hoisting engines was placed on the seventh level to hoist the coal.

Various air holes in the different veins were driven to the surface to make connections with the fans for proper ventilation.

A steam shovel has been in operation part of the year to load up barley coal for transportation to market.

Vulcan Colliery.—On No. 1 slope, the sixth level was opened up and connections made with the fan.

The Primrose plane referred to in last year's report was completed by installing a letting down drum, and gangways driven east and west. An air hole through old workings to ventilate this portion of the mine is nearly completed.

Middle Lehigh Colliery.—In the first level, west, a tunnel was commenced from the Seven Foot vein, north dip, to the Buck Mountain vein, south dip, and south also on the same course. It has cut the Skidmore, bottom and middle splits of Mammoth vein, south dip; also the middle and bottom splits of the Mammoth vein on the north dip, and will be continued to the Buck Mountain vein, north dip. 21 feet have been driven and the total length will be 700 feet.

A tunnel was driven from the Buck Mountain vein, second level, south dip, to Seven Foot vein, south dip, 160 feet.

A new bottom was made on the No. 3 slope, first level, to permit all coal to be hoisted up one slope.

Two diamond drill holes were drilled from the Seven Foot vein, second level, to the basin of the Skidmore vein, to tap the water in this basin.

A 16-foot ventilating fan, reversible, was erected, direct connected, and run by a 14x30 engine. This greatly improves the ventilation.

A small plant was installed to load fine coal mechanically for preparation, including head frame, pocket and double drum engines.

Clay strippings on crop or Buck Mountain vein to the east have been extended and coal mined from finished strippings during the year.

The colliery was idle three months during the year, during which time opening work inside was advanced rapidly.

TRUMAN M. DODSON COAL COMPANY

Kaska William Colliery.—Tunnel from No. 2 shaft level Seven Foot to Fox bench, to open up 1st level in the new shaft.

Tunnel from Skidmore to bottom bench in No. 4 slope for ventilation.

Tunnel from east Seven Foot to Fox split for ventilation in No. 1 slope east gangway.

Tunnel from Skidmore to bottom bench to rob pillars in the east bottom split No. 1 slope level.

Tunnel from Seven Foot to Top Split to connect first level on new shaft to No. 1 slope level.

Two tunnels are being driven from the Top Split to Bottom Split, also from Top Split to Seven Foot.

MARYD COAL COMPANY

Maryd Colliery.—Boiler House. One set Battery Stirling boilers, 250 H. P.

No. 1 Slope. North tunnel driven 2nd level, 175 feet to Buck Mountain vein. 18x18 inch Duplex pump installed, third level.

No. 2 Slope. Tunnel from Holmes to Bottom Split, 356 feet. Airway parallel with tunnel to Bottom Split, 356 feet. West Side. —Tunnel from Primrose to Holmes, 92 feet. East Side.—Tunnel from Holmes to Primrose, 90 feet.

No. 3 Slope. 16-foot Exhaust fan installed. Tunnel south from Diamond, 333 feet, north to Orchard, 160 feet. The water tapped and drained from Potts Old Red Ash slope workings.

Shaft. Pump house built in rock and 18x8x18 inch pump installed.

COXE BROTHERS AND COMPANY, INCORPORATED

Oneida Colliery.—Slope No. 1. Gangways were continued in the Buck Mountain vein and a dip gangway started in the basin, bottom of slope, to prove and develop the coal below present gangway levels, with a view to having a good supply of coal opened when the new slope, sunk 2100 feet east of slope No. 1, will be ready for operation. At present the slope and pipeway have been driven from the third to the first lift and are now continued to the surface.

Slopes Nos. 2 and 4. Did not produce during the year as the east gangways ran into faults and it required some time to complete the preparatory work for starting a tunnel across the basin to the north and for sinking a slope to open the coal below present working levels. The tunnel was driven over 600 feet and penetrated two veins from 10 to 14 feet thick, dipping to the south and to the north respectively. Nine diamond drill holes have been drilled through the coal measures, but the ground between the face of No. 4 East Buck Mountain workings and the Green Mountain workings of the Lehigh and Wilkes-Barre Coal Company is so knotted up by cross-saddles and inverts that it is almost impossible to compare the results of these nine drill holes with the veins actually worked either at the Green Mountain or Oneida mines.

Slopes Nos. 3, 5 and 6. These workings, which extend over the spoon end of the Buck Mountain basin on the west of the Oneida territory, produced most of the coal from this colliery during the year. They are flat workings and the coal was loaded as fast as it was mined. This section has also a nice large vein.

Strippings have been started along the north crop, west of slope No. 6, and 28,000 yards removed since July. About 100,000 tons of coal will be available by these strippings.

The hoisting shaft was extended 190 feet to the bottom. The shaft has two compartments—one for hoisting and one for pumping —and the same engine handles the coal from the two levels by different size drums, and the whole arrangement works satisfactorily.

Double track tunnel, 426 feet long, to the east and west of the shaft, connecting with the workings, was completed during September. The shaft was driven up from the bottom in rough outlines and squared and timbered while loading down. An 8 inch drill hole had been put down to the level of the bottom twenty-two years ago for the purpose of facilitating the sinking. This drill hole proved of great advantage to the shaft-men, as it gave them excellent ventilation. Over three hundred cars were handled on the deep hoist during nine hours work within a month after hoisting was resumed.

DODSON COAL COMPANY

Morea Colliery.—A large electric haulage plant has been installed on the three upper levels, consisting of three General Electric 8-ton locomotives, equipped with 10-ton motors, five miles of trolley wire and one McEwen engine 16x14, directly connected with a General compound wound 300 volt generator.

Electric lights have also been installed in the breaker, office, and a number of the houses in the town, and a five-ton electrically driven ice plant has also been placed at the store of the Morea Supply Company.

Two Manning upright boilers, 145 H. P. each, have been installed and are an improvement to the No. 4 slope hoisting plant.

Twenty-five mine cars have been added to the mine equipment, and one 8 foot blowing fan has been placed in the boiler house.

The heavy timbers in the breakers have also been renewed during the past year.

57 feet of rock tunnel driven connecting the Bottom Split Mammoth with the Skidmore on the north dip, in continuance of the main eastern tunnel on the 1st level.

No. 4 Slope was completed, having been sunk 428 feet this year.

The electric plant has done away with three steam locomotives, and this has very much improved the ventilation.

PHILLIPS BROTHERS COAL COMPANY

Silver Hill Colliery.—Inside. A tunnel was driven south from north dip of Holmes vein to Mammoth, a distance of 197 feet.

A tunnel was also driven south from No. 34 breast East Holmes gangway to Primrose vein 135 feet, and continued on to the Orchard, a distance of 78 feet, with the intention of intersecting these veins on the north dip, also the Mammoth, Skidmore, Buck Mountain and the Lykens Valley veins.

Air holes were driven on Holmes and Primrose veins to surface.

Outside. A 12-foot Crawford and McCrummon reversible fan was installed on the Holmes vein.

A scraper line 300 feet long, with a 10x24 engine attached, was erected during the year and one 100 H. P. Erie locomotive boiler was installed.

EAST LEHIGH COAL COMPANY

East Lehigh Colliery.—One 300 H. P. battery of Babcock and Wilcox boilers installed.

A slope is being sunk on the B vein, down 220 feet from the surface and 145 feet below the water level drift. The intention is to sink the slope 250 feet below water level. Size of slope 12 feet wide by 7 feet clear of the rail.

Mine Foremen's Examinations

The annual examination of applicants for certificates of qualification as Mine Foremen and Assistant Mine Foremen was held in Union Hall, Pottsville, April 8 and 9. The Board of Examiners was composed of the following members: John Curran, Mine Inspector, Pottsville; James Tinley, Superintendent, Tamaqua; Nicholas Murrey, Miner, Cumbola; John B. Richards, Miner, New Philadelphia.

The following persons passed a satisfactory examination and were recommended for certificates:

Mine Foremen

Charles Dresch, Mahanoy City; William Jones, Coal Dale.

Assistant Mine Foremen

William Murray, Port Carbon; Charles McGuire, Morea; Dennis Boyle, Kaska; John English, Kaska; David S. Jones, Audenried; John Lewis, Mahanoy City; James Logan, Shepton; August Von Blargan, Shepton; Elmer Von Blargan, Shepton; Michael McMahon, Shepton; Charles McBride, McAdoo.

Nineteenth District

SCHUYLKILL COUNTY

Pottsville, Pa., March 10, 1908.

Hon. James E. Roderick, Chief of Department of Mines:

Sir: I have the honor of transmitting herewith my annual report as Inspector of Mines for the Nineteenth Anthracite District, for the year ending December 31, 1907.

Respectfully submitted,

M. J. BRENNAN,

Inspector.

SUMMARY OF STATISTICS

Number of collieries,	19
Number of mines,	35
Number of mines in operation,	35
Number of tons of coal shipped to market,	2,509,119
Number of tons used at mines for steam and heat,	505,422
Number of tons sold to local trade and used by employes,	37,536
Number of tons produced,	3,052,077
Number of tons produced by compressed air machines,	—
Number of tons produced by electrical machines,	—
Number of persons employed inside of mines,	4,245
Number of persons employed outside,	2,798
Number of fatal accidents inside of mines,	19
Number of fatal accidents outside,	4
Number of non-fatal accidents inside of mines,	37
Number of non-fatal accidents outside,	13
Number of tons of coal produced per fatal accident inside,	160,636
Number of persons employed per fatal accident inside,	223
Number of persons employed per fatal accident outside,	699
Number of persons employed per non-fatal accident inside,	115
Number of persons employed per non-fatal accident outside,	215
Number of wives made widows,	16
Number of children orphaned,	37
Number of steam locomotives used inside of mines,	1
Number of steam locomotives used outside,	23
Number of electric motors used inside,	11
Number of fans in use,	33
Number of gaseous mines in operation,	29
Number of non-gaseous mines in operation,	6
Number of new mines opened,	2
Number of old mines abandoned,	1

TABLE A

PRODUCTION OF COAL

Names of Operators	Tons
Philadelphia and Reading Coal and Iron Company,	1,067,391
St. Clair Coal Company,	617,809
Lytle Coal Company,	414,286
Pine Hill Coal Company,	236,630
Oak Hill Coal Company,	225,222
Buck Run Coal Company,	184,031
Mt. Hope Coal Company,	88,432
Darkwater Coal Company,	68,967
Crystal Run Coal Company,	51,242
E. White and Company,	35,397
John H. Davis Company,	33,171
Cain Brothers Company,	14,284
Butcher Creek Coal Company,	11,080
Joseph H. Denning,	4,135
Total,	3,052,077

Production by Counties

Schuylkill,	3,052,077

TABLE B.—Fatal and non-fatal accidents inside and outside of mines; number of tons of coal produced per accident; number of persons employed; number employed per accident

Names of Operators	Fatal Accidents			Non-fatal Accidents			Tons of coal produced per fatal accident inside	Tons of coal produced per non-fatal accident inside	Number of employes inside	Number of employes outside	Total number of employes	Number of employes inside per fatal accident	Number of employes outside per fatal accident	Number of employes inside per non-fatal accident	Number of employes outside per non-fatal accident
	Inside	Outside	Total	Inside	Outside	Total									
Philadelphia and Reading Coal and Iron Co.,	7	3	10	16	5	21	152,484	66,712	1,724	1,297	3,021	246	432	108	259
St. Clair Coal Co.,	3	1	4	3	1	4	205,936	205,936	497	336	833	166	336	166	336
Lytle Coal Co.,	1	....	1	10	3	13	414,286	41,429	565	205	770	565	....	57	68
Pine Hill Coal Co.,	2	....	2	3	1	4	118,315	78,877	433	191	624	216	....	144	191
Oak Hill Coal Co.,	2	....	2	4	1	5	112,611	56,306	380	180	560	190	....	95	180
Buck Run Coal Co.,	1	....	1	....	....	....	184,031	....	205	134	339	205	....	....	....
Mt. Hope Coal Co.,	1	....	1	....	1	1	88,432	....	127	71	198	127	....	....	71
Darkwater Coal Co.,	....	....	....	....	1	1	....	....	65	77	142	....	....	....	77
Crystal Run Coal Co.,	1	....	1	....	....	....	51,242	....	86	96	182	86	....	....	....
E. White and Co.,	1	1	1	1	....	1	35,397	35,397	48	42	90	48	....	48	....
Miscellaneous companies,	....	....	....	....	....	....	....	....	115	169	284	....	....	....	....
Totals and averages for district,	19	4	23	37	13	50	160,636	82,489	4,245	2,798	7,043	223	699	115	215

TABLE C.—Classification of Fatal Accidents Inside and Outside of Mines

	Months													
	January	February	March	April	May	June	July	August	September	October	November	December	Totals	Percentages
Causes of Accidents Inside														
Falls of coal,	....	....	....	1	...	....	...	1	....	....	....	1	3	15.79
Falls of slate,	....	....	....	1	...	1	....	....	1	....	....	....	3	15.79
Falls of roof,	1	....	3	....	1	....	...	....	....	....	1	....	6	31.58
Mine cars,	....	....	....	....	...	....	....	1	....	....	....	....	1	5.26
Explosions of gas and dust,	....	....	1	....	...	....	....	....	....	....	....	....	1	5.26
Premature blasts,	....	....	....	....	...	....	....	1	....	....	....	2	3	15.79
Falling into shafts,	....	....	....	....	...	....	1	....	....	....	....	....	1	5.26
Miscellaneous,	....	....	1	....	...	....	...	....	....	....	....	....	1	5.27
Totals,	1	....	5	2	1	1	1	3	1	....	1	3	19	100.00
Causes of Accidents Outside														
Cars,	....	1	....	....	...	....	...	1	....	....	....	....	2	50.00
Machinery,	....	....	....	....	...	....	....	....	....	....	1	....	1	25.00
Miscellaneous,	....	....	....	....	...	....	....	1	....	....	....	....	1	25.00
Totals,	....	1	....	....	....	....	....	2	....	....	1	....	4	100.00
Grand totals inside and outside,	1	1	5	2	1	1	1	5	1	....	2	3	23	

TABLE D.—Classification of Non-fatal Accidents Inside and Outside of Mines

	Months													
	January	February	March	April	May	June	July	August	September	October	November	December	Totals	Percentages
Causes of Accidents Inside														
Falls of coal,	....	1	....	....	1	....	....	....	1	1	....	....	4	10.81
Falls of slate,	1	....	....	1	....	....	....	1	....	....	....	....	3	8.11
Falls of roof,	....	....	....	....	....	....	....	....	....	....	....	1	1	2.70
Mine cars,	....	....	....	1	1	....	1	1	....	....	....	....	4	10.81
Explosions of gas and dust,	2	3	1	1	....	2	2	1	....	1	2	....	15	40.54
Explosions of powder and dynamite,	....	2	....	....	....	2	....	....	1	....	....	....	5	13.52
Premature blasts,	....	....	....	....	1	....	....	....	....	....	....	....	1	2.70
Miscellaneous,	....	1	....	....	....	2	....	....	....	....	1	....	4	10.81
Totals,	3	7	1	3	3	6	3	3	2	2	3	1	37	100.00
Causes of Accidents Outside														
Cars,	1	....	....	2	....	1	....	1	....	1	....	1	7	53.84
Machinery,	....	....	....	....	....	....	....	....	1	....	1	....	2	15.39
Miscellaneous,	1	....	1	....	....	....	....	1	....	....	1	....	4	30.77
Totals,	2	....	1	2	....	1	....	2	1	1	2	1	13	100.00
Grand totals inside and outside,	5	7	2	5	3	7	3	5	3	3	5	2	50	

TABLE E.—Occupations of Persons Killed or Fatally Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	**Totals**
Inside													
Fire bosses and assistants,	1	...	...	...	...	...	...	...	...	...	...	..	1
Miners,	...	...	2	2	1	1	...	2	1	...	1	1	11
Miners' laborers,	...	...	3	...	...	...	...	...	...	...	...	...	3
Drivers and runners,	...	...	...	...	...	...	...	1	...	...	...	...	1
Company men,	...	...	...	...	...	...	1	...	...	...	..	...	1
All other employes,	...	...	...	...	...	...	...	...	...	...	...	2	2
Totals,	1	...	5	2	1	1	1	3	1	....	1	3	19
Outside													
Engineers and firemen,	...	...	...	...	...	...	...	2	...	...	...	...	2
All other employes,	...	1	...	...	...	...	...	...	...	...	1	....	2
Totals,	...	1	...	...	...	...	...	2	...	...	1	....	4
Grand totals inside and outside,	1	1	5	2	1	1	1	5	1	....	2	3	23

TABLE F.—Occupations of Persons Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Inside													
Miners,	2	7	1	1	2	4	2	2	2	1	2	1	27
Miners' laborers,	1	....	....	2	....	....	....	....	...	1	....	....	4
Drivers and runners,	...	....	....	....	....	....	1	....	....	....	....	....	1
Company men,	...	....	....	....	1	2	....	1	....	....	1	....	5
Totals,	3	7	1	3	3	6	3	3	2	2	3	1	37
Outside													
Engineers and firemen,	....	...	....	....	....	....	....	1	....	....	...	....	1
Slatepickers (boys),	...	....	....	....	....	1	....	....	...	....	...	....	1
All other employes,	2	....	1	2	....	....	...	1	1	1	2	1	11
Totals,	2	....	1	2	...	1	....	2	1	1	2	1	13
Grand totals inside and outside,	5	7	2	5	3	7	3	5	3	3	5	2	50

TABLE G.—Nationality of Persons Killed or Fatally Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
American,	1	...	2	1	....	....	1	1	....	....	....	1	7
Welsh,	...	....	....	....	....	....	....	1	....	....	....	....	1
Polish,	....	...	...	...	....	....	...	2	....	....	...	....	2
Hungarian,	....	...	...	...	....	....	....	....	....	....	1	....	1
Italian,	...	...	1	...	...	...	....	....	...	....	....	2	3
Slavonian,	...	...	1	...	...	....	...	....	...	....	....	....	1
Litnuanian,	...	....	....	1	1	....	....	....	1	....	1	....	4
Austrian,	...	....	....	....	....	....	....	1	....	....	....	....	1
Russian,	....	....	....	....	....	1	....	....	....	....	....	....	1
Greek,	....	1	....	....	....	....	....	....	....	....	....	....	1
Tyrolean,	....	....	1	....	....	....	....	....	....	....	....	....	1
Totals,	1	1	5	2	1	1	1	5	1	....	2	3	23

TABLE H.—Nationality of Persons Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
American,	....	1	....	1	1	2	....	1	1	....	1	1	9
Welsh,	1	....	....	....	....	....	1	....	....	....	....	....	2
Irish,	....	....	....	....	....	....	....	....	....	....	1	....	1
German,	....	....	....	....	1	1	....	....	....	....	2	....	4
Polish,	....	3	1	....	....	....	....	1	....	....	....	1	6
Italian,	....	....	....	1	....	1	....	....	....	1	....	....	3
Slavonian,	....	2	1	1	1	2	....	1	....	....	....	....	8
Lithuanian,	1	1	....	2	....	1	2	2	2	2	1	....	14
Russian,	1	....	....	....	....	....	....	....	....	....	....	....	1
French,	2	....	....	....	....	....	....	....	....	....	....	....	2
Totals,	5	7	2	5	3	7	3	5	3	3	5	2	50

TABLE I.—Operators and mines, kind of openings, type and size of fans, size of furnaces, volume of air produced by fan or furnace per minute, number of splits of air currents, and number of persons employed inside

Names of Operators and Mines	Kind of opening	Gaseous or non-gaseous	Method of ventilation	Diameter of fan in feet	Width of blades in feet	Depth of blades in feet	Number of revolutions per minute	Water gauge developed—in inches	Name of fan	Power used	Number of splits of air currents	Number of cubic feet of air per minute entering the mine at inlet	Total quantity of air per minute circulating in all the splits in cubic feet	Number of persons employed inside
Philadelphia and Reading Coal and Iron Co.														
Wadesville Colliery, 2 shafts, ...	Shaft,....	Gaseous,	Fan,.....	21	7	6	80	1.2	Guibal, ...	Steam,.......	9	77,460	55,360	261
	Shaft,....	Gaseous,	Fan,.....	21	7	6	73	1.2	Guibal, ...	Steam,.......	10	78,245	56,000	......
Phoenix Park Colliery:														
Phoenix, ...	Slope,....	Gaseous,	Fan,.....	15	5	3.5	76	1	Guibal, ...	Steam,.......	5	32,173	21,500	268
Phoenix, ...	Shaft,....	Gaseous,	Fan,.....	21	7	6	......	1.7	Guibal, ...	Steam,.......	8	70,052	43,200	......
Otto Colliery:														
Red Ash, ...	Slope,...	Gaseous,	Fan,.....	21	7	6	82	1	Guibal, ...	Steam,.......	6	66,540	24,495	100
White Ash, ...	Slope,....	Gaseous,	Fan,.....	15	5	3.5	80	1	Guibal, ...	Steam,.......	3	36,200	17,200	38
Mud, ...	Drift,....	Non-gas.	Fan,.....	12	.....	......	......	.5	Guibal, ...	Steam,.......	3	29,000	16,500	28
Holmes, ...	Drift,....	Gaseous,	Fan,.....	5	22	16	120	.2	Guibal, ...	Steam,.......	1	5,600	5,100	25
Glendower Colliery:														
West, ...	Slope,....	Gaseous,	Fan,.....	12	4	3.6	65	.7	Guibal, ...	Steam,.......	5	47,253	21,233	78
Crosby, ...	Slope,....	Gaseous,	Fan,.....	15	5	3.6	65	1.3	Guibal, ...	Steam,.......	5	....	....	......
Taylorsville, ...	Slope,....	Gaseous,	Fan,.....	21	5.5	4.6	73	.8	Guibal, ...	Steam,.......	4	105,655	46,211	101
Daniel, ...	Slope,....	Gaseous,	....	......	.....	......	......	......	....	....	....	....	....	......
Pine Knot Colliery:														
Pine Knot, ...	Shaft,....	Gaseous,	Fan,.....	18	6	5.2	19	.4	Guibal, ...	Steam,.......	2	18,200	14,300	32
Paynes, ...	Drift,....	Non-gas.	Natural,	......	.....	......	....	.....	....	....	....	18,000	14,000	20
Thomaston, ...	Slope,....	Gaseous,	Fan,.....	5	.....	......	125	.3	Guibal, ...	Steam,.......	1	6,760	5,000	20
John Veith Colliery:														
No. 1, ...	Shaft,....	Gaseous,	Fan,.....	15	5	4.6	27	.2	Guibal, ...	Steam,.......	2	19,600	16,000	35
No. 2, ...	Shaft,....	Gaseous,	Fan,.....	15	5	4.6	25	.1	Guibal, ...	Steam,.......	2	18,500	15,000	32
St. Clair Coal Co.														
St. Clair Colliery:														
St. Clair, ...	Shaft,....	Gaseous,	Fan,.....	14	5	3.6	72	1	Guibal, ...	Steam,.......	5	53,667	47,200	......
St. Clair, ...	Slope,....	Gaseous,	Fan,.....	14	5	3.6	80	.1	Guibal, ...	Steam,.......	4	63,700	57,000	......

Lytle Coal Co.														
Lytle Colliery:														
Lytle,	Shaft,...	Gaseous,	Fan,.....	18	7	5.10	85	.2	Guibal, ...	Steam,.......	19	187,284	154,384	365
Lytle,	Slope,...	Gaseous,	Fan,.....	18	7	5.10	90	1.9						
Lytle,	Slope,...	Gaseous,	Fan,.....	18	7	5.5	100	1.8						
Pine Hill Coal Co.														
Pine Hill Colliery:														
Pine Hill,	Shaft,....	Gaseous,	Fan,.....	16	4.10	4.6	106	.7	Guibal, ...	Steam,.......	....	....	....	.....
Pine Hill,	Slope,....	Gaseous,	Fan,.....	22	6	5.6	64	.9	Guibal, ...	Steam,.......	12	147,800	124,000	276
Pine Hill,	Drift,....	Non-gas.	Fan,.....	16	4.10	4.6	82	1.	Crawford McCrimson	Electricity,..	6	70,675	55,000	157
Oak Hill Coal Co.														
Oak Hill Colliery:														
Oak Hill,	Shaft,....	Gaseous,	Fan,.....	24	8.4	6.3	70	1.	Guibal, ...	Steam,.......	10	74,800	45,700	125
Oak Hill,	Slope,....	Gaseous,	....	......	......	....	....	......	....	....	....	....	....	.....
Oak Hill,	Drift,....	Gaseous,	Fan,.....	12	4	3.6	46	.5	Guibal, ...	Steam,.......	5	26,000	15,500	38
Buck Run Coal Co.														
Buck Run Colliery:														
Buck Run,	Slope,....	Gaseous,	Fan,...	12	3.9	3.5	85	1.6	Guibal, ...	....	2	105,000	75,500	205
				16	5	4	85	1.5			1			
Buck Run,	Slope,....	Gaseous,	Fan,.....	16	4.7	3.4	116	1.6	Guibal, ...	....	3	....	....	......
Darkwater Coal Co.														
Newcastle,	Drift,....	Non-gas.	Fan,.....	10	4	3	60	.5	Guibal, ...	....	2	15,000	12,500	60
Crystal Run Coal Co.														
Broad Mountain Colliery:														
Broad Mountain,	Slope,....	Gaseous,	Fan,.....	16	4.6	4.6	50	1	Guibal, ...	Steam,.......	4	40,000	14,000	31
E. White and Co.														
Howard Colliery:														
Howard,	Slope,....	Gaseous,	Fan,.....	12	4.2	3.4	40	.7	Guibal, ...	Steam,.......	2	24,000	16,000	50
John H. Davis Co.														
Ellsworth Colliery:														
Four Foot,	Slope,...	Non-gas.	Fan,.....	6	.21	.13	150	.2	Guibal, ...	Steam,.......	2	7,000	6,300	31
Cain Brothers Co.														
Cain Colliery:														
Cain,	Slope,....	Non-gas.	Fan,.....	12	4	3.6	45	.9	Guibal, ...	Steam,.......	4	23,600	16,900	56

12 non-gaseous mines, natural ventilation, not included

TABLE 1.—Operators, location of collieries, railroads, etc.

Names of Operators and Collieries	County	Name of General Superintendent	Post Office	Name of Superintendent	Post Office	Railroad to Mine
Philadelphia and Reading Coal and Iron Co.						
Wadesville, Phoenix Park, Otto, Glendower, John Veith, Pine Knot Washery, Anchor Washery,	Schuylkill,	W. J. Richards,	Pottsville,	Reese Tasker,	Pottsville,	P. and R.
St. Clair Coal Co.						
St. Clair, St. Clair Washery,	Schuylkill,			W. T. Smythe,	Pottsville,	P. and R.
Lytle Coal Co.						
Lytle,	Schuylkill,	R. A. Quin,	Wilkes-Barre.	Arthur Kennedy,	Minersville,	P. and R.
Pine Hill Coal Co.						
Pine Hill,	Schuylkill,			G. W. Kaiser,	Minersville,	Pennsylvania
Oak Hill Coal Co.						
Oak Hill,	Schuylkill,			C. A. Schwenck,	Minersville,	P. and R.
Buck Run Coal Co.						
Buck Run,	Schuylkill,	James B. Neale,	Minersville,	John Conway,	Minersville,	P. and R.
Mt. Hope Coal Co.						
Mt. Hope,	Schuylkill,			I. D. Beahm,	Port Carbon,	P. and R.
Darkwater Coal Co.						
Newcastle,	Schuylkill,			John Conway,	Minersville,	P. and R.
Crystal Run Coal Co.						
Broad Mountain,	Schuylkill,			Lee J. Sandridge,	Frackville,	P. and R.
E. White and Co.						
Howard,	Schuylkill,	Richard White,	Pottsville,			P. and R.
John H. Davis Co.						
Ellsworth,	Schuylkill,	John H. Davis,	St. Clair,			P. and R.

Cain Brothers Co. Cain,	Schuylkill,	Michael Cain,	Pottsville,			P. and R.
Butcher Creek Coal Co. Laurel Run,	Schuylkill,	James J. Whims,	St. Clair,			P. and R.
Joseph H. Denning Sebastopol,	Schuylkill,	Jos. H. Denning,	St. Clair,			P. and R.

TABLE 2.—Number of tons of coal mined, number of days worked, number of persons employed, number killed and injured, quantity of powder and dynamite used, etc.

Names of Operators and Collieries	County	Number of tons of coal shipped to market	Number of tons used at collieries for steam and heat	Number of tons sold to local trade and used by employes	Total production of coal in tons	Number of days worked	Number of employes	Number of fatal accidents	Number of non-fatal accidents	Number of kegs of powder used	Number of pounds of dynamite used	Number of horses and mules
Philadelphia and Reading Coal and Iron Co.												
Wadesville,	Schuylkill,	242,254	30,035	1,591	273,880	249	710	......	11	2,115	80,469	51
Phoenix Park,		166,918	35,500	2,086	204,504	283	612	2	5	27	66,288	71
Otto,		120,013	58,628	1,768	180,409	243	639	1	......	1,977	64,096	78
Glendower,		100,880	43,805	528	145,213	283	508	4	2	1,002	60,309	39
John Veith,*		......	......	......	......	......	91	1	......	......	21,550	11
Pine Knot Washery,†		128,297	41,969	107	170,373	......	367	2	3	41	‡23,460	24
Anchor Washery,		87,017	5,995	......	93,012	......	94	......	......	1	87	......
Totals,	......	845,379	215,932	6,080	1,067,391	......	3,021	10	21	5,163	316,259	274
St. Clair Coal Co.												
St. Clair,	Schuylkill,	424,923	80,030	5,111	510,064	276	795	4	4	14,041	23,350	59
St. Clair Washery,		98,245	9,500	......	107,745	......	38	......	......	......	......	......
Totals,	......	523,168	89,530	5,111	617,809	......	833	4	4	14,041	23,350	59
Lytle Coal Co.												
Lytle,	Schuylkill,	320,612	84,860	8,814	414,286	284	770	1	13	586	130,206	91
Pine Hill Coal Co.												
Pine Hill,	**Schuylkill,**	**210,921**	**25,000**	709	236,630	268	624	2	4	6,713	39,550	35

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*Not yet shipping
‡Used in developing Pine Knot Colliery.
†Production from culm bank.

Oak Hill Coal Co. Oak Hill,	Schuylkill,	193,836	28,000	3,386	225,222	290	560	2	5	3,470	40,381	51
Buck Run Coal Co. Buck Run,	Schuylkill,	165,192	18,250	589	184,031	286	339	1	......	199	69,141	37
Mt. Hope Coal Co. Mt. Hope,	Schuylkill,	75,811	4,800	7,821	88,432	247	198	1	1	220	20,375	14
Darkwater Coal Co. Newcastle,	Schuylkill,	57,972	10,950	45	68,967	256	142	......	1	105	5,708	12
Crystal Run Coal Co. Broad Mountain,	Schuylkill,	38,524	12,000	718	51,242	211	182	1	......	10	9,600	15
E. White and Co. Howard,	Schuylkill,	27,731	7,500	166	35,397	206	90	1	1	180	4,800	13
John H. Davis Co. Ellsworth,	Schuylkill,	29,373	3,000	798	33,171	305	120	......	......	75	9,550	11
Cain Brothers Co. Cain,	Schuylkill,	11,634	2,500	150	14,284	146	76	......	......	150	10,255	2
Butcher Creek Coal Co. Laurel Run,	Schuylkill,	8,455	2,500	125	11,080	127	66	......	......	....	3,000	5
Joseph H. Denning Sebastopol,	Schuylkill,	511	600	3,024	4,135	231	22	......	......	....	....	10
Grand totals,		2,509,119	505,422	37,536	3,052,077	....	7,043	23	50	30,912	682,175	629

TABLE 2.— PART 2

Names of Operators	County	Number of Boilers					Locomotives			Number of steam engines of all classes	Total horse power	Number of pumps delivering water to surface	Capacity in gallons per minute	Quantity delivered to surface per minute—gallons	Number of electric dynamos	Number of air compressors
		Cylindrical	Horse power	Tubular	Horse power	Total horse power	Steam	Air	Electric							
Philadelphia and Reading Coal and Iron Co.	Schuylkill, ...	24	1,080	70	12,040	13,120	9	......	......	149	21,485	22	11,894	6,926	....	9
St. Clair Coal Co.,		9	450	18	2,700	3,150	6	......	5	24	3,551	8	2,000	1,300	4	....
Lytle Coal Co.,		....	....	21	3,050	3,050	1	......	......	16	7,000	*	2,500	1,052	1	3
Pine Hill Coal Co.,		....	....	3	2,250	2,250	......	......	3	7	900	2	4,000	800	2	1
Oak Hill Coal Co.,		....	....	8	2,310	2,310	3	......	......	15	1,275	2	2,000	1,100	....	....
Buck Run Coal Co.,		....	....	8	1,500	1,500	1	......	3	23	950	3	1,800	400	1	1
Mt. Hope Coal Co.,		....	....	8	975	975	2	......	......	12	925	......	....	....	....	....
Darkwater Coal Co.,		....	....	4	600	600	1	......	......	16	730	3	4,500	1,500	....	1
Crystal Run Coal Co.,		....	....	10	1,100	1,100	1	......	......	17	800	2	780	400	....	....
E. White and Co.,		....	....	4	575	575	......	......	......	......	....	3	2,600	1,300	....	....
John H. Davis Co.,		....	....	4	450	450	......	......	......	4	150	2	600	....	....	1
Cain Brothers Co.,		....	....	2	200	200	......	......	......	7	175	1	700	150	....	....
Butcher Creek Coal Co.,		....	....	3	440	440	......	......	......	5	90	1	350	100	....	....
Joseph H. Denning,		1	18	2	25	43	......	......	......	3	50	......	....	....	....	....
Totals,	....	34	1,548	165	28,215	29,763	24	......	11	298	38,081	49	33,724	15,028	8	16

*Tanks

TABLE 3.—Number of each class of employes inside and outside of mines

Names of Operators and Collieries	County	Inside											Outside									Grand total inside and outside
		Mine foremen	Assistant mine foremen	Fire bosses and assistants	Miners	Miners' laborers	Drivers and runners	Doorboys and helpers	Pumpmen	Company men	All other employes	Total inside	Superintendents	Foremen	Blacksmiths and carpenters	Engineers and firemen	Slate pickers (boys)	Slate pickers (men)	Bookkeepers and clerks	All other employes	Total outside	
Philadelphia and Reading Coal and Iron Co.																						
Wadesville,	Schuylkill,	1	....	8	189	92	38	......	......	48	89	465	....	2	7	34	30	29	3	140	245	710
Phoenix Park,		1	....	6	178	61	28	4	......	52	105	435	....	1	11	23	16	9	3	114	177	612
Otto,		3	....	8	106	37	20	4	......	115	82	375	....	3	13	41	19	9	5	174	264	639
Glendower,		1	....	4	94	58	11	2	5	52	42	269	....	1	8	28	28	14	3	157	239	508
John Veith,		....	1	...	1	32	3	......	......	10	16	63	....	1	2	9	......	......	1	15	28	91
Pine Knot Washery,		1	....	2	4	36	4	......	......	31	29	117	....	3	8	41	5	12	2	179	250	367
Anchor Washery,		....	....	...	......	......	......	......	......	......	......	....	....	1	3	5	6	......	1	78	94	94
Totals,		7	1	28	572	316	104	10	5	308	373	1,724	....	12	52	181	104	73	18	857	1,297	3,021
St. Clair Coal Co.																						
St. Clair,	Schuylkill,	3	....	4	180	129	33	25	8	......	115	497	1	2	20	41	62	40	4	128	298	795
St. Clair Washery,		....	....	...	......	......	......	......	......	......	......	....	....	1	....	4	5	1	......	27	38	38
Totals,		3	....	4	180	129	33	25	8	......	115	497	1	3	20	45	67	41	4	155	336	833
Lytle Coal Co.																						
Lytle,	Schuylkill,	1	2	10	240	41	43	9	12	99	108	565	1	1	11	19	55	15	6	97	205	770
Pine Hill Coal Co.																						
Pine Hill,	Schuylkill,	2	1	5	258	83	52	1	4	27	......	433	1	1	7	17	38	33	3	91	191	624
Oak Hill Coal Co.																						
Oak Hill,	Schuylkill,	1	....	7	223	65	26	5	3	35	15	380	1	2	10	27	35	3	4	98	180	560

TABLE 3.—Continued

Names of Operators and Collieries	County	Inside										Outside										Grand total inside and outside
		Mine foremen	Assistant mine foremen	Fire bosses and assistants	Miners	Miners' laborers	Drivers and runners	Doorboys and helpers	Pumpmen	Company men	All other employes	Total inside	Superintendents	Foremen	Blacksmiths and carpenters	Engineers and firemen	Slate pickers (boys)	Slate pickers (men)	Bookkeepers and clerks	All other employes	Total outside	
Buck Run Coal Co. Buck Run, ...	Schuylkill,.......	1	1	3	75	24	32	11	2	52	4	205	1	1	10	15	10	6	8	83	134	339
Mt. Hope Coal Co. Mt. Hope, ...	Schuylkill,.......	1	2	....	66	26	7	......	......	25	......	127	1	1	6	18	5	......	1	39	71	198
Darkwater Coal Co. Newcastle, ...	Schuylkill,.......	1	....	1	16	12	5	2	2	26	......	65	1	1	5	10	8	......	1	51	77	142
Crystal Run Coal Co. Broad Mountain, ...	Schuylkill,.......	1	1	1	40	13	10	1	6	13	......	86	1	1	4	12	22	1	1	54	96	182
E. White and Co. Howard, ...	Schuylkill,.......	1	....	1	21	15	4	......	2	1	3	48	1	1	2	8	12	......	1	17	42	90
John H. Davis Co. Ellsworth, ...	Schuylkill,.......	1	....	....	20	16	3	......	2	8	......	50	1	1	2	6	12	1	1	46	70	120
Cain Brothers Co. Cain, ...	Schuylkill,.......	1	....	....	18	12	2	......	1	5	1	40	1	1	2	4	6	3	1	18	36	76
Butcher Creek Coal Co. Laurel Run, ...	Schuylkill,.......	1	1	....	6	6	......	......	......	......	......	14	1	1	2	6	3	2	2	35	52	66
Joseph H. Denning Sebastopol, ...	Schuylkill,.......	1	....	....	4	4	1	......	......	1	......	11	....	....	....	1	3	3	......	4	11	22
Grand totals, ...	....	23	9	60	1,739	762	322	64	47	600	619	4,245	12	27	133	369	380	181	51	1,645	2,798	7,043

TABLE 3.— PART 2

Names of Operators and Collieries	County	Number of Days Worked in Breaker												
		January	February	March	April	May	June	July	August	September	October	November	December	Total
Philadelphia and Reading Coal and Iron Co.														
Wadesville,	Schuylkill,	16	17	15	20	19	22	21	22	24	26	23	24	249
Phoenix Park,		23	23	19	24	25	25	24	23	24	26	23	24	283
Otto,		19	23	19	25	25	25	16	....	17	26	24	24	243
Glendower,		26	23	18	24	24	25	24	23	24	26	22	24	283
St. Clair Coal Co.														
St. Clair,	Schuylkill,	25	23	20	20	23	24	23	23	24	26	22	23	276
Lytle Coal Co.														
Lytle,	Schuylkill,	21	24	25	25	24	24	23	26	24	26	24	18	284
Pine Hill Coal Co.														
Pine Hill,	Schuylkill,	16	12	25	23	25	24	23	25	23	25	24	23	268
Oak Hill Coal Co.														
Oak Hill,	Schuylkill,	24	24	24	25	23	24	24	24	24	26	24	24	290
Buck Run Coal Co.														
Buck Run,	Schuylkill,	24	24	24	24	24	25	24	22	23	26	25	21	286
Mt. Hope Coal Co.														
Mt. Hope,	Schuylkill,	16	22	20	23	24	21	20	20	18	19	21	23	247
Darkwater Coal Co.														
Newcastle,	Schuylkill	21	17	25	24	23	22	19	25	22	26	16	16	256
Crystal Run Coal Co.														
Broad Mountain,	Schuylkill,	23	21	17	23	23	23	6	9	14	15	18	19	211
E. White and Co.														
Howard,	Schuylkill,	18	16	15	19	17	19	14	20	20	21	20	7	206

TABLE 3.—PART 2—Continued

Names of Operators and Collieries	County	Number of Days Worked in Breaker												
		January	February	March	April	May	June	July	August	September	October	November	December	Total
John H. Davis Co. Ellsworth,	Schuylkill,	25	24	23	26	27	25	26	26	25	27	28	23	305
Cain Brothers Co. Cain,	Schuylkill,	....	....	....	....	....	10	20	23	23	25	23	22	146
Butcher Creek Coal Co. Laurel Run,	Schuylkill,	6	6	5	6	7	9	10	12	16	14	20	16	127
Joseph H. Denning Sebastopol,	Schuylkill,	20	20	20	20	22	20	17	22	17	17	20	16	231

TABLE 4.—Fatal accidents inside and outside of mines

Date of accident	Name of Person	Nationality	Occupation	Age	Married or single	Number of widows	Number of orphans	Name of Mine	County	Nature and Cause of Accident in Brief
Jan. 17	James Moran, ...	American,...	Fire boss, .	40	M.	1	8	Phoenix Park, ..	Schuylkill,.....	Killed by fall of rock while standing on turnout that was being enlarged. The miners fired a blast and retired. Moran came from a different direction and did not know they were blasting. The blast set the top in motion and it fell.
Feb. 23	Andrew Polosky, ...	Greek,........	Teamster, ..	24	M.	1	2	Glendower, ...		Fatally injured between dumper and trestle. While hauling empty ash dumper over the surface to shop for repairs, the jolting of the dumper caused the pin that retains the box of the truck to work loose, allowing the box to swing, catching him against breaker trestle. Outside.
March 1	John Zerbey, ...	American,...	Laborer, ...	31	S.	....	....	Glendower, ...		Killed by fall of rock. He was holding tape line to measure length of collar for set of timber in cross cut between Daniel and Skidmore veins, when a piece of rock fell, discharging timber that was supporting it.
14	Mike Hoydren, ...	Slavonian,...	Laborer, ...	21	M.	1	....	St. Clair, ...		Fatally injured by fall of prop. He and his partner were erecting prop at face of breast. Hoydren slipped, allowing the weight of prop to rest on his partner who was unable to sustain it, and it fell on Hoydren, fracturing his skull.
15	Joseph Bensennie, ...	Tyrolean,....	Laborer, ...	39	M.	...	3	Mt. Hope, ...		Fatally injured by fall of rock. He was drilling hole in pillar in No. 3 slope when the rock fell from top and struck him before he could get away.
16	Michael Walabine, ...	Italian,......	Miner, ...	36	M.	1	...	Howard, ...		Fatally burned by gas. The fire boss found gas in his place in the morning and told him not to work until he had fixed the brattice. The fire boss left and soon after an explosion occurred. Walabine had gone to face of breast with light contrary to orders.

TABLE 4.—Continued

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Number of widows	Number of orphans	Name of Mine	County	Nature and Cause of Accident in Brief
March	27	Charles Ginther,	American,	Miner,	48	M.	1	...	Broad Mountain,	Schuylkill,	Killed by fall of rock. While in the act of removing pillars near the gangway, rock from the top fell on him.
April	8	Adam Bernatonia,	Lithuanian.	Miner,	52	M.	1	2	Phoenix Park,		Killed by fall of slate while in the act of prying loose coal from pillar on No. 2 plane.
	30	Ross James,	American,	Miner,	31	S.	....	....	Oak Hill,		Killed by fall of coal while endeavoring to loosen coal from pillar to finish loading last car for the shift.
May	27	Peter Macewskie,	Lithuanian,	Miner,	23	S.	....	....	St. Clair,		Killed by fall of rock. He attempted to pull it down but failed and went to work under it and was killed.
June	5	Procup Demanovage,	Russian,	Miner,	34	M.	1	4	St. Clair,		Killed by fall of slate. He went to face of breast to examine it after blast, and while looking around a piece fell on him.
July	16	John Brennan,	American,	Loader boss,	28	M.	1	2	Lytle,		Killed by falling into shaft from No. 3 level. He got off cage in the morning on west side and waited for bottom men to come up from No. 4 level. When the cage arrived, he crossed to east side on it and sat down for a time and then got up and walked into shaft. He had forgotten they were hoisting from this level and that the cage had gone.
Aug.	3	David Jones,	Welsh,	Engineer,	45	M.	1	4	St. Clair,		Fatally injured. He sat with others on bumper of locomotive with his legs hanging over the rail. The end rail struck box that encased water pipe, knocking him to track against the rail and fracturing his skull. Outside.
	12	Michael Patrick,	Austrian,	Fireman,	30	M	1	1	Glendower,		Killed by being struck on the head by an ash dumper. The mule pulled the dumper over head block on top of plane and it fell down the plane into boiler room and struck Patrick. Outside.

Aug.	23	Joseph Rochitus, ...	Polish,.......	Miner, ...	25	M.	1	1	Buck Run, ...	Schuylkill,.....	Killed by fall of coal. He was endeavoring to place prop under set of timber that had been disturbed by blast at face of chute, when the coal fell on him.
	23	Anthony Cominsky, ..	Polish,.......	Miner, ...	35	M.	1	3	Pine Hill, ...		Killed by coal from blast. He was in the 1st pillar heading of No. 32 breast preparing a charge of powder when the men in No. 33 breast exploded a blast on rib, opening up the heading Cominsky was in. Pieces of coal from blast struck him.
	27	John Connors, ...	American,...	Driver, ...	22	S.	....	....	John Veith No. 2,		Killed by unknown cause. He was found under the front of mine car in East tunnel. No person was near him and no one was able to tell how he was killed.
Sept.	1	Michael Debiskie, ...	Lithuanian,.	Miner, ...	25	S.	....	....	Pine Hill, ...		Killed by fall of slate. He was examining top at face of breast when piece of slate fell on him.
Nov.	2	Charles Gustites, ...	Lithuanian,.	Miner, ...	30	M.	1	1	Otto, ...		Killed by fall of rock while in the act of trimming loose piece at face of breast.
	2	John Sabolskie, ...	Hungarian, .	Laborer, ...	41	M.	1	4	Glendower, ...		Killed by falling on sprocket wheel of scraper line. He was shoveling coal into scraper line under breaker and arranged plank to walk on. The plank tilted and he fell. Outside.
Dec.	2	George Dillman, ...	American,...	Miner, ...	45	M.	1	2	Oak Hill, ...		Fatally injured by fall of top coal while in the act of trimming loose coal from pillar.
	20	Samuel Demarko, ...	Italian,.....	Machine runner,	23	S.	....	....	Pine Knot, ...		Killed at No. 1 shaft. Demarko was picking at face of air tunnel and the point of pick came in contact with dynamite that remained unexploded in back of drill hole that was supposed to have been blasted the night of the 18th. The dynamite exploded, killing Demarko and Carmaniae.
		Antonio Carmaniae, .	Italian,......	Helper, ...	28	M.	1	....	Pine Knot, ...		

TABLE 5.—Non-fatal accidents inside and outside of mines

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Name of Mine	County	Nature and Cause of Accident in Brief
Jan.	5	Adam Pingoris,	French.	Miner,	34	M.	Wadesville,	Schuylkill,	Face and hands burned by gas. Pingoris brushed gas down on his laborer's lamp, burning both men.
		Charles Carpenins,	French,	Laborer,	24	M.			
	8	Daniel Loyd,	Welsh,	Laborer,	51	S.	Pine Knot,	Schuylkill,	Head injured. Hod full of brick that was being hoisted to boiler room fell on him. Outside.
	16	John Todski,	Lithuanian,	Laborer,	25	S.	Newcastle,		Ribs fractured. Caught between car and timber while helping to start mule team. Outside.
	22	Michael Morrow,	Russian,	Miner,	40	M.	Phoenix Park,		Skull fractured. While removing pillar, a piece of slate fell on him.
Feb.	7	William Smulskis,	Lithuanian,	Miner,	28	S.	Lytle,		Face and eyes injured by explosion of dynamite cap that he had accidentally placed in his tobacco pipe when filling it with tobacco.
	8	Gethan Jenkins,	American,	Miner,	46	M.	Oak Hill,		Leg fractured. While removing old set of timber, collar fell on him.
	11	Steve Gonak,	Slavonian.	Miner,	36	M.	St. Clair,		Face and hands burned. While thawing dynamite with his mining lamp, in breast heading, the dynamite ignited and it in turn ignited a keg of powder, burning him.
	15	William Neiman,	Polish,	Miner,	32	M.	Wadesville,	Schuylkill,	Face and hands burned by gas They hung their lamps on top of brattice prop and brushed gas on them.
		Thomas Loss,	Polish,	Miner,	32	M.			
	16	Tony Breva,	Slavonian,	Miner,	30	M.	Lytle,		Head cut by fall of coal while removing old set of timber.
	20	Albert Crustic,	Polish,	Miner,	23	S.	Lytle,		Face and hands burned by gas. He ignited blast when there was gas at face of breast.
March	16	Michael Single,	Slavonian,	Miner,	28	S.	Howard,		Face and hands burned by gas.
	27	Mike Motti,	Polish,	Laborer,	35	M.	Pine Knot,		Head lacerated. Chain block fell on him while removing casing from bore hole. Outside.

April	6	William C. Williams,	American,	Laborer,	20	S.	Lytle,	Schuylkill,	Arm fractured. Coal plane barney struck him while picking coal. Outside.
	15	Ta Pa Luscana,	Italian,	Laborer,	27	S.	Pine Hill,		Head and breast cut. Slipped and fell under car. Outside.
	16	Mike Rosanki,	Lithuanian,	Laborer,	28	S.	Lytle,		Collar bone fractured. Caught between timber and mine car.
	19	Jacob Burcoonis,	Lithuanian,	Miner,	42	S.	Lytle,		Face and hands burned by gas. Went to face of breast with naked light.
	25	Paul Mantsick,	Slavonian,	Laborer,	26	M.	Wadesville,		Leg fractured by fall of slate at face of gangway.
May	1	Charles Luckenbill,	American,	Miner,	35	S.	Oak Hill,		Leg injured by piece of coal from blast.
	1	Howard Barton,	German,	Miner,	28	S.	Phoenix Park,		Leg fractured by fall of coal at face of breast.
	20	John Kurdoria,	Slavonian,	Loader,	32	M.	St. Clair,		Collar bone fractured. Mine car ran over him.
June	7	John Furanitza,	Slavonian,	Miner,	25	S.	Wadesville,	Schuylkill,	Neck slightly burned by gas.
		Mike Gonock,	Slavonian,	Miner,	35	M.			Hands and face burned by gas. These men had locked lamps, but when Gonock's lamp was found the oil cup was separated from the top, indicating that it had been tampered with.
	14	Ralph Petdro,	Italian,	Loader,	20	S.	Phoenix Park,	Schuylkill,	Leg fractured. Set of timber fell on him.
	22	Michael H. Ryan,	American,	Miner,	27	S.	Glendower,		Face and hands burned by explosion of powder.
	22	James Daley,	American,	Miner,	23	S.	Glendower,		Face and hands burned by explosion of powder.
	26	Lewis Hart,	German,	Loader,	21	S.	Phoenix Park,		Leg fractured. Mine cage descended on him.
	26	Thomas Gilbert,	Lithuanian,	Slate picker,	14	S.	Oak Hill,		Head cut, chest and neck burned. Caught between car and steam pipe. Outside.
July	30	Thomas Swerbellis,	Lithuanian,	Miner,	29	S.	Lytle,	Schuylkill,	Face and hands burned by gas. Their lamps were extinguished by a blast. They struck a match to light them and ignited the gas.
		Joseph Cusacavage,	Lithuanian,	Miner,	25	M.			
	31	John Williams,	Welsh,	Driver,	28	M.	Pine Hill,	Schuylkill,	Hips injured. Squeezed between car and prop.
Aug.	3	Edward Foster,	American,	Engineer,	27	S.	St. Clair,		Leg fractured by falling from mine car. Outside.
	9	John Pladress,	Lithuanian,	Miner,	25	S.	Lytle,		Face and hands burned by explosion of gas. Went to face of breast with naked light.
	27	Michael Donchess,	Lithuanian,	Miner,	50	M.	Lytle,		Back injured by fall of slate.
	30	John Lukats,	Slavonian,	Loader,	25	S.	St. Clair,		Leg bruised and cut. He jumped on loaded car that was ascending the slope and the rope broke.
	30	Mike Boinock,	Polish,	Laborer,	30	M.	Lytle,		Jaw fractured. Struck by stick of timber that rolled off truck. Outside.
Sept.	10	Joseph Cerosko,	Lithuanian,	Miner,	38	S.	Oak Hill,		Leg fractured. A piece of coal fell on him at face of gangway.
	18	Peter Rontka,	Lithuanian,	Miner,	38	M.	Pine Hill,		Face and hands burned by explosion of powder.
	30	Howard Thompson,	American,	Laborer,	16	S.	Lytle,		Leg fractured. His foot slipped and was caught in scraper line. Outside.

TABLE 5.—Continued

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Name of Mine	County	Nature and Cause of Accident in Brief
Oct.	2	Frank Conasavage,	Lithuanian,	Miner,	38	S.	Lytle,	Schuylkill,	Hands and face burned by explosion of gas.
	3	Andrew Draskins,	Lithuanian,	Laborer,	25	S.	Oak Hill,		Leg fractured by fall of coal.
	29	James Pepper,	Italian,	Oiler,	21	S.	Pine Knot,		Leg fractured. Truck ran over it. Outside.
Nov.	11	Edward Murphy,	Irish,	Track-layer,	50	M.	Phoenix Park,		Hand cut off and foot injured. Caught between hoisting rope and pulley.
	14	Fredrick Jack,	German,	Miner,	26	M.	Wadesville,		Hands and face burned by gas explosion. Fredrick Jack brushed gas on their lamps.
		August Jack,	German,	Miner,	27	M.			
	19	John Yednock,	Lithuanian,	Patcher,	18	S.	Mt. Hope,		Leg fractured. Slipped while stepping from locomotive. Outside.
	27	George Kull,	American,	Laborer,	19	S.	Wadesville,		Arm crushed while oiling machine. Was caught in shaft of scraper line. Outside.
Dec.	4	James Hillman,	American,	Switchman,	20	S.	Wadesville,		Leg fractured. Caught between mine car and locomotive. Outside.
	28	Charles Hartz,	Polish,	Miner,	44	S.	Pine Hill,		Leg fractured. While removing pillar, a piece of rock fell on him.

CONDITION OF COLLIERIES

PHILADELPHIA AND READING COAL AND IRON COMPANY

Wadesville.—Ventilation, drainage and sanitary condition good.
Phoenix Park.—Ventilation, drainage and sanitary condition good.
Glendower.—Ventilation, drainage and sanitary condition good.
Otto.—Drainage and sanitary condition good. Ventilation fair.
Pine Knot.—Ventilation, drainage and sanitary condition good.
John Veith.—Ventilation, drainage and sanitary condition good.

ST. CLAIR COAL COMPANY

St. Clair.—Ventilation, drainage and sanitary condition fair.

LYTLE COAL COMPANY

Lytle.—Drainage fair, except in Skidmore plane west where it is bad. Sanitary condition good. General ventilation fair.

PINE HILL COAL COMPANY

Pine Hill.—Ventilation and drainage fair. Sanitary condition good.

OAK HILL COAL COMPANY

Oak Hill.—Ventilation and drainage fair.

BUCK RUN COAL COMPANY

Buck Run.—Drainage in part of colliery fair. Ventilation and sanitary condition fair.

MT. HOPE COAL COMPANY

Mt. Hope.—Drainage and sanitary condition fair. Ventilation fair at times owing to old works and broken ground.

DARKWATER COAL COMPANY

Newcastle.—Ventilation, drainage and sanitary condition fair.

CRYSTAL RUN COAL COMPANY

Broad Mountain.—Ventilation, drainage and sanitary condition fair.

JOHN H. DAVIS COMPANY

Ellsworth.—Ventilation fair. Drainage fair, except in North Dip slope where it is bad.

E. WHITE AND COMPANY

Howard.—Ventilation, drainage and sanitary condition fair.

CAIN BROTHERS COMPANY

Cain.—Ventilation fair. Drainage and sanitary condition good.

BUTCHER CREEK COAL COMPANY

Laurel Run.—Drainage and sanitary condition fair.

JOSEPH H. DENNING

Sebastopol.—Drainage and sanitary condition good.

IMPROVEMENTS

PHILADELPHIA AND READING COAL AND IRON COMPANY

Pine Knot Colliery.—Breaker completed for preparation of coal from banks, but still in progress for preparation of fresh mined coal.

Repairs made to boiler and boiler house, damaged by fire in August, 1906.

Drill room made and drilling to tap water in Mine Hill Gap old colliery.

Drill room to tap west Pine Knot colliery water. Drilling yet to be done.

Payne's tunnel extended to the Buck Mountain vein, and air holes to surface.

Drilling slush holes; sinking slopes, and opening headings to extinguish the fire in the crop of the Daniel vein.

No. 2 Shaft started.

Thomaston Colliery.—Locomotive road from Pine Knot to Thomaston; also branch to Anchor rock slope.

Air slope in Lelar vein.

Babcock and Wilcox boilers.

Removing water from mines.

Richardson Colliery.—16x30 hoisting engine at Lelar slope.

Pump in Lelar slope.

2 Tubular boilers.

Steam line boilers to hoisting engine and pump.

Removing water from mines.

Glendower Colliery.—Fan and engine, Buck Mountain vein.

Hoisting engine and house for Buck Mountain slope.

6 Tubular boilers erected.

Elevator and scraper line for boiler coal.

Steam line from Taylorsville, boilers to breaker.

Buck Mountain Slope level tunnel across basin to the Buck Mountain vein.

Air tunnel, Buck Mountain slope level, across basin.

Passageway under Buck Mountain vein slope.

Daniel Vein (Taylorsville), slope re-opened.

Western Glendower.—Tunnel from Daniel vein to Buck Mountain vein.

Tunnel from Daniel vein to Billy or Skidmore vein.

Tunnel from Skidmore to the Seven Foot vein.

Phoenix Park No. 3 Colliery.—50,000 gallon water tank erected.

Steam line from breaker to Tracy air shaft.

Steam pipe bore hole to pump at foot of slope.

Slant air tunnel from Diamond to Tracy vein.

Pump house at foot of Diamond vein slope.

Goyne pump erected.

Preparations in progress for sinking slope in Peach Mountain vein.

John Veith Colliery.—Sinking No. 1 shaft.

Second outlet tunnel from No. 2 shaft level to No. 1 shaft.

Turnouts are being driven from foot of Nos. 1 and 2 shafts.

Otto Colliery.—Hoisting engine for Holmes vein No. 3 slope.

Vulcan hoisting engines for White Ash bore hole slope.

Second hand fan for Mud drift workings.

New carpenter and blacksmith shop.

4 Tubular boilers.

Bore hole to pump room, foot of Nest slope.

Steam line to Holmes vein No. 3 slope and extension to Mud drift fan.

Tunnel from Skidmore to Buck Mountain vein, White Ash water level.

Tunnel from Skidmore to Buck Mountain vein, White Ash bore hole slope, 3rd Lift.

Tunnel from Skidmore to Little vein, White Ash Skidmore slope level.

Pump room made in rock between Holmes and Primrose vein at the foot of the Nest slope, and pump is being erected.

Air tunnel from Holmes to Black Heath vein—Nest slope workings.

Otto No. 2 Colliery.—Additional sinking engine.

Additional head frame on shaft.

Ventilating fan on No. 2 shaft.

Air compressor.

Additional locomotive boiler.

Sinking shaft 633 feet deep, December 31.

Wadesville Colliery.—A tunnel on shaft level from Skidmore to Buck Mountain vein completed, cutting the Seven Foot vein at a distance of 530 feet, and a gangway turned west on Buck Mountain and Seven Foot veins.

The main tunnel on Holmes 2nd life completed from Orchard to Big Diamond, a distance of 485 feet, and now driving to Little Diamond.

The planes in the Holmes and Skidmore veins are being driven up another lift.

ST. CLAIR COAL COMPANY

St. Clair Colliery.—In the drift slope on No. 3 east gangway a plane was driven up 700 feet and equipped with a 37 horse power electric hoist to let the coal down to the No. 3 east gangway level, and two new gangways on said plane are now being driven.

At No. 2 east gangway a tunnel was driven south 400 feet to cut the Seven Foot or bottom split of the Skidmore vein. The vein when cut was in poor condition, but a gangway has been driven west and the vein is improving. This tunnel will be continued through to the upper split of the Skidmore vein.

Two new electric haulage motors have been added to the equipment of this slope making five in use at the colliery.

LYTLE COAL COMPANY

Lytle Colliery.—The tunnel from the Skidmore to the Holmes vein east side of 5th level has been completed; total distance 350 feet, 225 feet of which have been driven this year.

A rock plane and tunnel made from the 4th level to the basin of the Tracy vein, distance 152 feet.

A tunnel from the Skidmore to Black Heath west side 5th level, distance 50 feet.

A tender slope is now being driven in the Orchard vein from the 5th level to the 6th level, single track, dip 25 degrees; distance driven to December 31, 386 feet.

New carpenter, blacksmith and machine shops at the shaft have been completed.

An electric light plant has been installed to light the engine house, boiler house, offices, and furnishes light for the entire plant at night.

DARKWATER COAL COMPANY

Newcastle Colliery.—Erected a 20 foot fan on the Four Foot vein, south dip, main basin.

Finished erecting two pumps with a capacity of about 4,000 gallons per minute, with which to pump out the main basin water from Repplier Colliery.

One 1¼ inch hole and four 3 inch holes drilled into the main body of water, and pumping commenced October 16, the water at that time having a head of about 200 feet.

Completed the Tender slope about 650 feet long, and double tracked the main slope.

OAK HILL COAL COMPANY

Oak Hill Colliery.—Outside. Three 500 H. P. Maxim boilers erected, built in one nest, together with boiler house and coal conveying lines to convey coal overhead from breaker to boiler house. Also 3 lengths of 8x18 inch Conveyor lines put up on the north side of the old breaker for the purpose of conveying the old culm banks in to the breakers.

Inside. The water that was standing in the Hill basin in the White Ash and Black Heath veins was pumped out; the water was 357 feet vertical height. A tunnel was also started in 3rd lift north basin from the Skidmore to the Buck Mountain vein, but it has not yet cut the vein. In upper drift level a tunnel was driven to the Buck Mountain vein and gangways opened east and west on same.

BUCK RUN COAL COMPANY

Buck Run Colliery.—An inside slope has been sunk on the Daniel vein, south dip, from the 2nd to the 3rd level, and is now being continued to the 4th level.

The 3rd level gangways are being driven east and west, and a tunnel has been finished from the west gangway north to the Buck Mountain vein.

A tunnel has been finished from the north dip Crosby to the north dip Buck Mountain.

Mine Foremen's Examinations

The annual examination of applicants for certificates of qualification as Mine Foremen and Assistant Mine Foremen was held in Union Hall, Pottsville, April 8 and 9. The Board of Examiners was composed of the following persons:

Michael J. Brennan, Inspector, Pottsville; John McGuire, Superintendent, Pottsville; John O'Brien, Miner, Heckscherville; Charles Larkin, Miner, Branchdale, Edward Ryan, Clerk, Mackeysburg.

The following persons passed a satisfactory examination and were recommended for certificates:

Mine Foremen

William Crook.

Assistant Mine Foremen

Chas. Gleason, Port Carbon; Daniel Dooley, Zerbe; James Brennan, Zerbe; Joseph Young, Pottsville; Thomas Doyle, Minersville; John Griffith, Minersville; Thomas J. Kelly, Minersville; Peter Keifer, Minersville; James P. McGuire, Minersville.

Twentieth District

SCHUYLKILL AND DAUPHIN COUNTIES

Lykens, Pa., February 21, 1908.

Hon. James E. Roderick, Chief of Department of Mines:

Sir: I have the honor of transmitting herewith my annual report as Inspector of Mines for the Twentieth Anthracite District, for the year ending December 31, 1907.

Respectfully submitted,

CHARLES J. PRICE,

Inspector.

SUMMARY OF STATISTICS

Number of collieries,	6
Number of mines,	22
Number of mines in operation,	22
Number of tons of coal shipped to market,	2,069,568
Number of tons used at mines for steam and heat,	395,476
Number of tons sold to local trade and used by employes,	37,043
Number of tons produced,	2,502,087
Number of tons produced by compressed air machines,	—
Number of tons produced by electrical machines,	—
Number of persons employed inside of mines,	3,951
Number of persons employed outside,	1,786
Number of fatal accidents inside of mines,	15
Number of fatal accidents outside,	3
Number of non-fatal accidents inside of mines,	41
Number of non-fatal accidents outside,	12
Number of tons of coal produced per fatal accident inside,	166,806
Number of persons employed per fatal accident inside,	263
Number of persons employed per fatal accident outside,	595
Number of persons employed per non-fatal accident inside,	96
Number of persons employed per non-fatal accident outside,	149
Number of wives made widows,	9
Number of children orphaned,	27
Number of steam locomotives used inside of mines,	1
Number of steam locomotives used outside,	15
Number of electric motors used inside,	12
Number of electric motors used outside,	2
Number of fans in use,	20
Number of gaseous mines in operation,	22

TABLE A

Production by Counties

Names of Operators	Tons
Philadelphia and Reading Coal and Iron Company,	1,518,839
Lykens Valley Coal Company, (Summit Branch Mining Company, Agent),	444,315
Summit Branch Mining Company,	296,739
Lehigh Valley Coal Company,	242,194
Total,	2,502,087

PRODUCTION OF COAL

Schuylkill,	1,761,033
Dauphin,	741,054
Total,	2,502,087

TABLE B.—Fatal and non-fatal accidents inside and outside of mines; number of tons of coal produced per accident; number of persons employed; number employed per accident

Names of Operators	Fatal Accidents			Non-fatal Accidents			Tons of coal produced per fatal accident inside	Tons of coal produced per non-fatal accident inside	Number of employes inside	Number of employes outside	Total number of employes	Number of employes inside per fatal accident	Number of employes outside per fatal accident	Number of employes inside per non-fatal accident	Number of employes outside per non-fatal accident
	Inside	Outside	Total	Inside	Outside	Total									
Philadelphia and Reading Coal and Iron Co., ..	7	....	7	14	4	18	216,977	108,488	2,172	891	3,063	310	....	155	223
Lehigh Valley Coal Co., ...	3	....	3	12	....	12	80,731	20,183	386	164	550	128	....	32	....
Summit Branch Mining Co., ...	3	2	5	5	4	9	98,913	59,348	614	388	1,002	204	194	123	97
Lykens Valley Coal Co., ...	2	1	3	10	4	14	222,157	44,431	779	343	1,122	389	343	78	86
Totals and averages for district, ...	15	3	18	41	12	53	166,806	61,027	3,951	1,786	5,737	263	595	96	149

TABLE C.—Classification of Fatal Accidents Inside and Outside of Mines

	Months													
	January	February	March	April	May	June	July	August	September	October	November	December	Totals	Percentages
Causes of Accidents Inside														
Falls of coal,	1	....	....	....	....	....	....	1	....	1	....	....	3	20.00
Falls of slate,	....	....	....	....	....	....	....	....	....	....	1	1	2	13.33
Falls of roof,	....	....	....	....	....	....	2	....	....	....	....	....	2	13.33
Mine cars,	....	....	....	1	....	....	....	....	....	....	1	....	2	13.33
Suffocation by gas, etc.,	....	....	....	....	....	....	....	....	....	....	....	1	1	6.67
Premature blasts,	....	....	....	....	1	....	....	....	....	....	....	....	1	6.67
Falling into slopes, etc.,	....	....	....	....	....	....	....	1	....	....	....	....	1	6.67
Miscellaneous,	....	....	....	....	....	2	....	....	....	....	....	1	3	20.00
Totals,	1	....	....	1	1	2	2	2	....	1	2	3	15	100.00
Causes of Accidents Outside														
Suffocation in chutes, etc.,	...	...	1	...	...	...	...	...	...	...	...	....	1	33.33
Miscellaneous,	1	....	....	....	1	....	....	....	....	....	....	....	2	66.67
Totals,	1	....	1	....	1	....	....	....	....	....	....	....	3	100.00
Grand totals inside and outside,	2	....	1	1	2	2	2	2	....	1	2	3	18	

TABLE D.—Classification of Non-fatal Accidents Inside and Outside of Mines

	Months													
	January	February	March	April	May	June	July	August	September	October	November	December	Totals	Percentages
Causes of Accidents Inside														
Falls of coal,	1	....	....	....	....	....	1	....	....	....	....	....	2	4.87
Falls of slate,	1	1	....	1	....	....	....	....	....	....	3	....	6	14.63
Falls of roof,	....	....	....	....	....	....	....	....	....	....	1	....	1	2.44
Mine cars,	1	4	2	1	1	....	....	1	1	1	....	....	12	29.27
Explosions of gas and dust,	3	....	2	....	....	....	....	....	....	1	....	....	6	14.63
Explosions of powder and dynamite,	....	....	1	....	....	....	....	....	1	1	....	....	3	7.32
Premature blasts,	....	....	....	....	1	....	....	....	....	....	....	....	1	2.44
Falling into slopes, etc.,	....	1	2	1	....	....	....	....	....	....	....	1	5	12.20
Mules,	....	....	....	....	1	....	....	....	....	....	....	....	1	2.44
Miscellaneous,	1	....	1	....	....	1	....	....	....	1	....	....	4	9.76
Totals,	7	6	8	3	3	1	1	1	2	4	4	1	41	100.00
Causes of Accidents Outside														
Cars,	....	....	....	....	1	....	....	2	1	....	....	1	5	41.67
Machinery,	2	1	....	....	1	....	....	....	....	....	....	....	4	33.33
Miscellaneous,	....	....	....	....	....	....	....	....	1	2	....	....	3	25.00
Totals,	2	1	....	....	2	....	....	2	2	2	....	1	12	100 00
Grand totals inside and outside,	9	7	8	3	5	1	1	3	4	6	4	2	53	

TABLE E.—Occupations of Persons Killed or Fatally Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Inside													
Miners,	1	....	....	....	1	....	2	1	....	1	1	1	8
Miners' laborers,	....	....	....	....	....	....	....	1	....	....	....	....	1
Drivers and runners,	....	....	....	....	....	....	....	....	....	....	1	1	2
Company men,	....	....	....	1	....	2	....	....	....	....	....	1	4
Totals,	1	....	....	1	1	2	2	2	....	1	2	3	15
Outside													
All other employes,	1	....	1	....	1	....	....	....	....	....	....	....	3
Totals,	1	....	1	....	1	....	....	....	....	....	....	....	3
Grand totals inside and outside,	2	....	1	1	2	2	2	2	....	1	2	3	18

TABLE F.—Occupations of Persons Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Inside													
Miners,	5	2	7	2	....	....	1	....	1	2	3	1	24
Miners' laborers,	1	....	1	....	2	....	....	....	....	....	...	....	4
Drivers and runners,	....	3	....	1	1	....	...	1	....	....	....	....	6
Pumpmen,	....	....	....	....	....	....	....	....	....	1	....	....	1
Company men,	1	....	....	....	....	1	....	....	1	1	1	....	5
All other employes,	....	1	....	....	....	....	....	....	....	....	....	....	1
Totals,	7	6	8	3	3	1	1	1	2	4	4	1	41
Outside													
Foremen,	....	....	....	....	1	....	....	....	....	....	....	....	1
All other employes,	2	1	....	....	1	....	....	2	2	2	....	1	11
Totals,	2	1	....	....	2	....	....	2	2	2	....	1	12
Grand totals inside and outside,	9	7	8	3	5	1	1	3	4	6	4	2	53

TABLE G.—Nationality of Persons Killed or Fatally Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
American,	1	....	....	1	2	2	2	1	....	1	2	1	13
Polish,	....	....	....	....	....	....	....	1	....	....	....	....	1
Slavonian,	....	....	1	....	....	....	....	....	....	....	....	....	1
Lithuanian,	1	....	....	....	....	....	....	....	....	....	....	....	1
Austrian,	....	....	....	....	....	....	....	....	....	....	....	2	2
Totals,	2	....	1	1	2	2	2	2	....	1	2	3	18

TABLE H.—Nationality of Persons Injured Inside and Outside of Mines

	Months												
	January	February	March	April	May	June	July	August	September	October	November	December	Totals
American,	6	4	6	1	3	1	1	3	3	6	2	1	37
English,	....	....	2	....	....	....	....	....	....	....	1	1	4
Irish,	....	....	....	....	1	....	....	....	....	....	....	....	1
German,	1	....	....	....	....	....	....	....	....	....	....	....	1
Polish,	....	1	....	1	1	....	....	....	....	....	....	....	3
Hungarian,	....	1	....	....	....	....	....	....	....	....	....	....	1
Slavonian,	1	1	....	....	....	....	....	....	....	....	....	....	2
Lithuanian,	1	....	....	....	....	....	....	....	....	....	1	....	2
Tyrolean,	....	....	....	1	....	....	....	....	1	....	....	....	2
Totals,	9	7	8	3	5	1	1	3	4	6	4	2	53

TABLE I.—Operators and mines, kind of openings, type and size of fans, size of furnaces, volume of air produced by fan or furnace per minute, number of splits of air currents, and number of persons employed inside

Names of Operators and Mines	Kind of opening	Gaseous or non-gaseous	Method of ventilation	Diameter of fan in feet	Width of blades in feet	Depth of blades in feet	Number of revolutions per minute	Water gauge developed—in inches	Name of fan	Power used	Number of splits of air currents	Number of cubic feet of air per minute entering the mine at inlet	Total quantity of air per minute circulating in all the splits in cubic feet	Number of persons employed inside
Philadelphia and Reading Coal and Iron Co.														
Lincoln Colliery:														
Lincoln No. 1,	Slope,	Gaseous,	Fan,	16	4.5	3.8	85	1.4	Guibal,	Steam,	29	253,600	238,900	1,011
Lincoln No. 2,	Slope,	Gaseous,		18	6	5.3	85	.8						
Lincoln No. 2 Vein Trial Slope,	Slope,	Gaseous,		12	4	5	104	.9						
Brookside Colliery:														
Brookside No. 1,	Slope,	Gaseous,	Fan,	18	6	5	80	1.8	Guibal,	Steam,	19	272,800	258,000	727
Brookside No. 4,	Slope,	Gaseous,		18	6	5	85	2						
Brookside Shaft,	Shaft,	Gaseous,		21	7	6	76	1.9						
Good Spring Colliery:														
Good Spring No. 1,	Slope,	Gaseous,	Fan,	18	6	5	80	.7	Guibal,	Steam,	18	174,780	150,000	423
Good Spring No. 2 Tender Slope,	Slope,	Gaseous,		18	6	5	80	.7						
Good Spring No. 3,	Slope,	Gaseous,		18	6	5	80	.7						
Good Spring, Lykens Valley Tunnel,	Tunnel,	Gaseous,		15	5	3.5	80	.5						
Lehigh Valley Coal Co.														
Blackwood Colliery:														
Blackwood,	Tunnel,	Gaseous,	Fan,	20	8	5.9	75	.6	Guibal,	Steam,	12	67,260	60,460	156
Woods,	Tunnel,	Gaseous,									5	30,300	21,000	78
Dundas,	Tunnel,	Gaseous,	Fan,	12	4	3	120	.2			6	38,480	28,520	140

Lykens Valley Coal Co.														
Short Mountain Colliery:														
Short Mountain No. 1, ...	Slope,....	Gaseous,	Fan,...	25	8	7	120	2	Guibal, ...	Steam, ...	15	197,000	174,000	779
Lykens Valley No. 2, ...	Slope,...	Gaseous,	Fan,...											
Underground Slope No. 4, ...	Slope,....	Gaseous,	Fan,...											
Williamstown Colliery:														
Williamstown Big Lick, ...	Slope,....	Gaseous,	5 Fans, .	20	8	7	110	2.7	Guibal, ...	Steam, ...	16	166,000	153,000	614
Williamstown No. 3, ...	Slope,....	Gaseous,												
Williamstown Bear Valley, ...	Slope,....	Gaseous,												
Williamstown Summit, ...	Slope,....	Gaseous,												
Williamstown No. 1, ...	Shaft,....	Gaseous,												
Williamstown No. 2, ...	Shaft,....	Gaseous,												

TABLE 1.—Operators, location of collieries, railroads, etc.

Names of Operators and Collieries	County	Name of General Superintendent	Post Office	Name of Superintendent	Post Office	Railroad to Mine
Philadelphia and Reading Coal and Iron Co.						
Lincoln,	Schuylkill,	W. J. Richards,	Pottsville,	Reese Tasker,	Pottsville,	P. and R.
Brookside,						
Good Spring,						
Valley View,						
Rausch Creek Washery,						
Middle Creek Washery,						
Lehigh Valley Coal Co.						
Blackwood,	Schuylkill,	S. D. Warriner,	Wilkes-Barre,	William Underwood,	Blackwood,	Lehigh Valley
Lykens Valley Coal Co.						
Short Mountain,	Dauphin,	R. A. Quin,	Wilkes-Barre,	William Auman,	Lykens,	Pennsylvania
Short Mountain Washery,						
Summit Branch Mining Co.						
Williamstown,	Dauphin,	R. A. Quin,	Wilkes-Barre,	William Auman,	Lykens,	Pennsylvania
Big Lick Washery,						

TABLE 2.—Number of tons of coal mined, number of days worked, number of persons employed, number killed and injured, quantity of powder and dynamite used, etc.

Names of Operators and Collieries	County	Number of tons of coal shipped to market	Number of tons used at collieries for steam and heat	Number of tons sold to local trade and used by employes	Total production of coal in tons	Number of days worked	Number of employes	Number of fatal accidents	Number of non-fatal accidents	Number of kegs of powder used	Number of pounds of dynamite used	Number of horses and mules
Philadelphia and Reading Coal and Iron Co.												
Lincoln,	Schuylkill,	423,580	40,548	7,670	471,798	282	1,233	2	7	10,195	31,814	127
Brookside,		277,855	74,550		352,405	286	1,027	5	5	2.752	42,906	122
Good Spring,		258,463	59,135	4,912	322,510	286	635		5	1,933	68,764	59
Valley View,							24				2,715	1
		959,898	174,233	12,582	1,146,712		2,919	7	17	14,880	146,199	309
Washeries												
Rausch Creek,	Schuylkill,	195,391	6,436		201,827		68		1			
Middle Creek,		150,817	18,953	529	170,299		76				10	2
		346,208	25,389	529	372,126		144		1		10	2
Totals,		1,306,106	199,622	13,111	1,518,839		3,063	7	18	14,880	146,209	311
Lehigh Valley Coal Co.												
Blackwood,	Schuylkill,	222,899	17,818	1,477	242,194	264	550	3	12	2,685	112,688	18
Lykens Valley Coal Co.												
Short Mountain,	Dauphin,	240,465	46,461	15,941	302,867	261	1,071	3	14	2,438	19,975	141
Short Mountain Washery,		104,268	36,707	473	141,448		51					
Totals,		344,733	83,168	16,414	444,315		1,122	3	14	2,438	19,975	141

TABLE 2.—Continued

Names of Operators and Collieries	County	Number of tons of coal shipped to market	Number of tons used at collieries for steam and heat	Number of tons sold to local trade and used by employes	Total production of coal in tons	Number of days worked	Number of employes	Number of fatal accidents	Number of non-fatal accidents	Number of kegs of powder used	Number of pounds of dynamite used	Number of horses and mules
Summit Branch Mining Co.												
Williamstown,	Dauphin,	172,015	85,026	5,843	262,884	257	975	5	9	2,894	72,309	89
Big Lick Washery,		23,815	9,842	198	33,855	....	27	....	....	....	....	......
Totals,	....	195,830	94,868	6,040	296,739	....	1,002	5	9	2,894	72,309	89
Grand totals,	....	2,069,568	395,476	37,043	2,502,087	....	5,737	18	53	22,897	351,181	559

TABLE 2.—PART 2

Names of Operators	County	Number of Boilers					Locomotives			Number of steam engines of all classes	Total horse power	Number of pumps delivering water to surface	Capacity in gallons per minute	Quantity delivered to surface per minute—gallons	Number of electric dynamos	Number of air compressors
		Cylindrical	Horse power	Tubular	Horse power	Total horse power	Steam	Air	Electric							
Philadelphia and Reading Coal and Iron Co., ..	Schuylkill,....	42	1,710	64	8,960	10,670	6	......	4	77	19,854	11	{4,800 {6,330	3,200 3,473	....	....
Lehigh Valley Coal Co., ...	Schuylkill,....	....	....	11	1,600	1,600	2	......	5	13	....				3	3
Lykens Valley Coal Co., ...	Dauphin,......	9	620	42	3,640	4,260	4	......	3	58	4,688	3	3,825	....	1	1
Summit Branch Mining Co., ...	Dauphin,......	12	420	64	8,000	8,420	4	......	2	67	7,000	6	3,940	1,622 4,313	3 2	2 2
Totals, ...	....	63	2,750	181	22,200	24,950	16	......	14	215	31,542	20	18,895	9,608	9	8

TABLE 3.—Number of each class of employes inside and outside of mines

Names of Operators and Collieries	County	Inside											Outside									Grand total inside and outside
		Mine foremen	Assistant mine foremen	Fire bosses and assistants	Miners	Miners' laborers	Drivers and runners	Doorboys and helpers	Pumpmen	Company men	All other employes	Total inside	Superintendents	Foremen	Blacksmiths and carpenters	Engineers and firemen	Slate pickers (boys)	Slate pickers (men)	Bookkeepers and clerks	All other employes	Total outside	
Philadelphia and Reading Coal and Iron Co.																						
Lincoln,	Schuylkill,	2	2	11	335	114	73	12	....	153	309	1,011	....	3	10	43	28	11	3	124	222	1,233
Brookside,		3	2	13	128	85	37	15	4	149	291	727	....	4	13	49	22	5	3	204	300	1,027
Good Spring,		2	....	9	158	70	13	6	4	59	102	423	....	3	10	27	31	7	3	131	212	635
Rausch Creek Washery,		....	....	...	......	......	......	....	....	......	....	....	....	1	2	6	3	....	1	55	68	68
Middle Creek Washery,		....	....	...	......	......	......	....	....	......	....	....	....	1	4	7	5	....	1	58	76	76
Valley View,		....	....	....	1	......	......	....	....	8	2	11	....	....	....	......	......	....	....	13	13	24
Totals,		7	4	33	622	269	123	33	8	369	704	2,172	....	12	39	132	89	23	11	585	891	3,063
Lehigh Valley Coal Co.																						
Blackwood,	Schuylkill,	3	5	....	200	60	20	6	....	92	....	386	1	2	20	15	14	11	3	98	164	550
Lykens Valley Coal Co.																						
Short Mountain,	Dauphin,	1	4	7	259	84	89	15	16	195	109	779	1	1	18	40	66	....	7	159	292	1,071
Short Mountain Washery,		....	....	....	......	......	......	....	....	......	....	....	....	1	4	10	1	....	....	35	51	51
Totals,		1	4	7	259	84	89	15	16	195	109	779	1	2	22	50	67	....	7	194	343	1,122
Summit Branch Mining Co.																						
Williamstown,	Dauphin,	2	4	5	213	48	35	4	14	40	249	614	1	2	14	72	49	....	5	218	361	975
Big Lick Washery,		....	....	....	......	......	......	....	....	......	....	....	....	....	....	5	......	....	....	22	27	27
Totals,		2	4	5	213	48	35	4	14	40	249	614	1	2	14	77	49	....	5	240	388	1,002
Grand totals,		13	17	45	1,294	461	267	58	38	696	1,062	3,951	3	18	95	274	219	34	26	1,117	1,786	5,737

TABLE 3.—PART 2

Names of Operators and Collieries	County	Number of Days Worked in Breaker												
		January	February	March	April	May	June	July	August	September	October	November	December	Total
Philadelphia and Reading Coal and Iron Co.														
Lincoln,	Schuylkill,	26	22	18	25	24	25	24	22	24	25	24	23	282
Brookside,		25	23	19	25	25	25	24	24	24	26	24	22	286
Good Spring,		25	23	18	25	25	24	24	24	24	26	24	24	286
Lehigh Valley Coal Co.														
Blackwood,	Schuylkill,	23	20	21	22	20	24	23	20	23	24	24	20	264
Lykens Valley Coal Co.														
Short Mountain,	Dauphin,	23	19	22	22	23	20	23	23	20	23	21	22	261
Summit Branch Mining Co.														
Williamstown,	Dauphin,	20	18	22	22	21	22	22	24	20	23	21	22	257

TABLE 4.—Fatal accidents inside and outside of mines

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Number of widows	Number of orphans	Name of Mine	County	Nature and Cause of Accident in Brief
Jan.	10	Joseph Klems,	Lithuanian,	Miner,	24	S.	....	....	Blackwood,	Schuylkill,...	Instantly killed by fall of coal while re-setting timber.
	12	Cyrus Miller,	American, ..	Watchman,	43	M	1	2	Short Mountain, ..	Dauphin,....	Suffocated by coal gas from locomotive in engine house. Dead when found. Outside.
March	1	George Brinkus,	Slavonian, .	Laborer, ..	40	M	1	3	Williamstown,	Dauphin,....	Smothered by rush of culm at dirt bank. Outside.
April	26	Harry Fry,	American, ..	Repairman,	21	S.	....	....	Lincoln,	Schuylkill,...	Instantly killed by mine cars on slope.
May	2	Henry Frederick,	American, ..	Chain boy,	18	S.	....	....	Williamstown,	Dauphin,....	Fatally injured by falling on circular saw. Died in hospital, May 7. Outside.
	21	Thomas Dolan,	American, ..	Miner,	44	M.	1	8	Williamstown,	Dauphin,....	Both arms blown off and injured internally. Died in hospital, May 22.
June	15	Thomas Davis,	American, ..	Starter, ..	37	S.	....	....	Blackwood,	Schuylkill,...	Smothered in chute while starting run. He fell into the chute and was buried by coal.
	18	John C. Forney,	American, .	Footman, .	30	M.	1	1	Short Mountain,	Dauphin,....	Fatally injured by being struck by falling pulley. Died same day.
July	19	Henry Harman,	American, ..	Miner,	33	M.	1	4	Williamstown,	Dauphin,....	Instantly killed by fall of rock while dressing off shot.
	29	George Forney,	American, ..	Miner,	49	M.	1	4	Brookside,	Schuylkill,...	Fatally injured by fall of rock. Died on the way home.
Aug.	8	Thomas Roak,	Polish,	Miner,	38	S.	....	....	Blackwood,	Schuylkill,...	Instantly killed by falling down manway.
	17	Claude Smith,	American, ..	Laborer,	19	S.	....	....	Lincoln,	Schuylkill,...	Instantly killed by fall of coal from high side of buggy gangway.
Oct.	24	Benjamin Woffenden, ..	American, ..	Miner,	24	S.	....	....	Williamstown,	Dauphin,....	Instantly killed by fall of coal in face of breast.
Nov.	4	Harvey Krall,	American, ..	Driver,	20	S.	....	....	Brookside,	Schuylkill,...	Found dead on gangway. Run over by mine cars.
	20	Henry Perkins,	American, ..	Miner,	35	M.	1	2	Brookside,	Schuylkill,...	Instantly killed by fall of slate at face of breast.
Dec.	10	Andrew Schneider,	Austrian,....	Miner,	24	M.	1	2	Brookside,	Schuylkill,...	Suffocated by an outburst of gas at face of breast.
	26	Richard Noble,	American, ..	Driver,	24	M.	1	1	Short Mountain,	Dauphin,....	Smothered in chute while starting coal at heading. He fell into chute and was wedged in the draw hole.
	27	Anthony Demorchia, ..	Austrian,....	Repairman,	27	S.	....	....	Brookside,	Schuylkill,...	Killed by fall of rock and debris caused by a prop falling out that had been loosened by a shot.

TABLE 5.—Non-fatal accidents inside and outside of mines

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Name of Mine	County	Nature and Cause of Accident in Brief
Jan.	5	John Pellish, Jr., ...	Slavonian, .	Motorman, ...	19	S.	Blackwood, ...	Schuylkill,...	Face and scalp lacerated and back and arm bruised by mine cars.
	21	Roy Lengel, ...	American, ..	Conveyor tender,	17	S.	Rausch Creek, ...	Schuylkill,...	Flesh on leg badly torn. Caught in cogs of conveyor line. Outside.
	22	Philip Fogel, ...	German,.....	Miner, ...	42	M.	Williamstown, ...	Dauphin,....	Face and hands burned by explosion of gas in No. 2 shaft counter.
	22	Harry Ratuzen, ...	American, ..	Miner, ...	36	M.			
	23	Ad. Nunavige, ...	Lithuanian,	Miner, ...	39	S.	Blackwood, ...	Schuylkill,...	Face and hand slightly burned by explosiin of gas in Diamond vein.
	25	Charles C. Hoffman, ..	American, ..	Miner, ...	34	S.	Short Mountain, ...	Dauphin,....	Two ribs fractured and body injured internally by fall of coal.
	26	Charles R. Welker, ...	American, ..	Miner, ...	26	M.	Short Mountain, ...	Dauphin,....	Body and leg badly bruised by fall of slate.
	26	Harry Stoudt, ...	American, ..	Laborer, ...	39	S.	Brookside, ...	Schuylkill,...	Collar bone fractured by a fall.
	30	John Reminger, ...	American, ..	Jig man, ...	17	S.	Good Spring, ...	Schuylkill,...	Leg and arm broken. Caught in shaft of machinery and whirled around. Outside.
Feb.	7	Stephen Auton, ...	Slavonian, .	Laborer, ...	28	M.	Williamstown, ...	Dauphin,....	Ankle twisted and fractured. Foot caught by crank wheel of engine. Outside.
	8	John Eckler, ...	American, ..	Driver, ...	28	S.	Lincoln, ...	Schuylkill,...	Clavicle fractured by being caught between mine cars.
	13	Thomas Carlin, ...	American, ..	Loader, ...	46	S.	Lincoln, ...	Schuylkill,...	Foot crushed by runaway car.
	15	Thomas Foley, ...	American, ..	Driver, ...	20	S.	Lincoln, ...	Schuylkill,...	Arm fractured by being caught between rib and car.
	20	John Woffenden, ...	American, ..	Miner, ...	24	S.	Blackwood, ...	Schuylkill,...	Body cut and bruised by falling down manway.
	21	John Hamunshe, ...	Hungarian,	Miner, ...	34	M.	Blackwood, ...	Schuylkill,...	Femur bone fractured by fall of slate.
	25	Peter Kei, ...	Polish, ...	Driver, ...	29	S.	Short Mountain, ...	Dauphin,....	Collar bone fractured by being caught between car and door frame.
March	5	William Boltz, ...	American, ..	Miner, ...	42	M.	Good Spring, ...	Schuylkill,...	Hands, face and back burned by explosion of powder.
	8	Charles G. Reigle, ...	American, ..	Miner, ...	30	M.	Short Mountain, ...	Dauphin,....	Stomach and left arm cut and hips bruised by buggy jumping off track.
	9	Joseph Dixon, ...	English,.....	Miner, ...	36	M.	Blackwood, ...	Schuylkill,...	Face, head and back lacerated by falling down manway. Overcome by powder smoke.
	9	William J. Bigliam, ...	English,.....	Miner, ...	30	M.			

TABLE 5.—Continued

Date of accident		Name of Person	Nationality	Occupation	Age	Married or single	Name of Mine	County	Nature and Cause of Accident in Brief
March	25	Harry Grimm,	American,	Laborer,	28	M.	Brookside,	Schuylkill,	Arm and three ribs fractured by being caught between car and chute.
	27	Philip Stein,	American,	Miner,	37	M.	Blackwood,	Schuylkill,	Nose fractured. Struck by drill.
	28	William Breslin,	American,	Miner,	31	M.	Short Mountain,	Dauphin,	Face and hands slightly burned by explosion of gas.
	28	J. G. Davis,	American,	Miner,	35	M.			
April	8	Frank Hydrick,	Polish,	Miner,	29	S.	Blackwood,	Schuylkill,	Head injured and face and body severely cut by falling down manway. He was overcome by powder smoke.
	17	Milt Shereman,	American,	Driver,	22	S.	Lincoln,	Schuylkill,	Arm broken below elbow. Caught between car and roof.
	25	Celesto Bertohn,	Tyrolean,	Miner,	30	M.	Blackwood,	Schuylkill,	Ankle dislocated by fall of rock while walking through tunnel.
May	2	Alvin Culbert,	American,	Laborer,	20	S.	Lincoln,	Schuylkill,	Ribs fractured. Kicked by mule.
	10	Joseph Yaunera,	Polish,	Driver,	20	S.	Short Mountain,	Dauphin,	Chest and back injured; squeezed between car and chute.
	13	D. R. Neyer,	American,	Asst. foreman,	42	M.	Brookside,	Schuylkill,	Leg fractured by rock dumper falling on it. Outside.
	17	John Condell,	Irish,	Repairman,	34	S.	Williamstown,	Dauphin,	Right leg fractured. Caught in machinery of breaker. Outside.
	21	Samuel Smith,	American,	Laborer,	30	M.	Williamstown,	Dauphin,	Leg and foot bruised and cut by debris from premature blast.
June	3	Oscar Bixler,	American,	Loader,	21	S.	Good Spring,	Schuylkill,	Leg broken below the knee. Struck by lump of coal that rolled down the slope.
July	13	Christ Geiger,	American,	Miner,	42	M.	Blackwood,	Schuylkill,	Face lacerated and back and right arm injured by fall of coal.
Aug.	5	N. A. Bowman,	American,	Driver,	24	M.	Williamstown,	Dauphin,	Back injured by falling under mine car. Outside.
	10	Roy Barrett,	American,	Car runner,	18	M.	Short Mountain,	Dauphin,	Right hand injured. Run over by mine car. Outside.
	22	C. Mahoney,	American,	Driver,	19	S.	Short Mountain,	Dauphin,	Right shoulder dislocated and arm fractured above elbow. Caught between mine car and low collar.
Sept.	5	Wilson Heckadon,	American,	Loader,	23	S.	Lincoln,	Schuylkill,	Leg fractured. Caught between rock and bumper of mine car.

Sept.	14	Henry Updegrave,	American,	Loader,	18	S.	Brookside,	Schuylkill,	Collar bone fractured by falling over a bank. Outside.
	17	Harry Witmer,	American,	Driver,	15	S.	Short Mountain,	Dauphin,	Foot squeezed. Run over by mine car on rock bank. Outside.
	27	Notoly Dapowly,	Tyrolean,	Miner,	24	S.	Blackwood,	Schuylkill,	Hands, arms and face severely burned by explosion of powder while making a cartridge.
Oct.	2	Irvin Unger,	American,	Miner,	23	S.	Good Spring,	Schuylkill,	Three fingers blown off by explosion of dynamite cap.
	2	John Maurer,	American,	Pumpman,	54	M.	Good Spring,	Schuylkill,	Right leg fractured by falling prop.
	4	James Miller,	American,	Miner,	23	S.	Williamstown,	Dauphin,	Arms and face slightly burned by explosion of gas.
	9	Ray Snyder,	American,	Loader,	17	S.	Short Mountain,	Dauphin,	Right knee badly bruised and ligaments torn. Caught between car bumpers.
	18	Jesse Marris,	American,	Driver,	36	S.	Short Mountain,	Dauphin,	Right arm broken by kick from a mule. Outside.
	19	J. Rumberger,	American,	Laborer,	56	S.	Short Mountain,	Dauphin,	Right leg fractured above the ankle by a log rolling on it. Outside.
Nov.	5	M. Kazinofski,	Lithuanian,	Miner,	27	M.	Blackwood,	Schuylkill,	Leg broken by fall of top rock.
	13	James Tallon,	English,	Miner,	34	M.	Brookside,	Schuylkill,	Back bruised and small bone in leg fractured by fall of slate.
	14	Charles Stewart,	American,	Timberman,	45	M.	Lincoln,	Schuylkill,	Ribs fractured by fall of slate.
	14	Em. Miller,	American,	Miner,	30	M.	Short Mountain,	Dauphin,	Right leg fractured below the knee by fall of slate.
Dec.	5	George Stauffer,	American,	Miner,	24	M.	Williamstown,	Dauphin,	Head and body bruised by falling down manway.
	7	George Close,	English,	Laborer,	60	M.	Williamstown,	Dauphin,	Left arm and leg severely cut and bruised. Caught by linch pin in mine car truck from which he fell. Outside.

FATAL ACCIDENTS

Falls of Coal, Slate and Roof

January 10, Blackwood Colliery, Joseph Klems, Lithuanian, miner, was instantly killed by a fall of coal while cleaning out a prop hole to reset timber that had been knocked out by a shot. The face of the breast was nearly level with the high side of the heading and the coal from the shot knocked the first set of timber out. Klems had started to reset this when the coal slid off a fault or upthrow in the bottom that could not be seen until the coal had fallen.

July 19, Williamstown Colliery, Henry Harman, American, miner, was instantly killed by a fall of rock in No. 1 shaft. He was robbing pillars in No. 9 vein west. The plan used to rob these pillars was to drive a chute up through the center of the pillar, then cut them off when they would run. The chute in which Harman was killed was up 12 feet from monkey heading and only 12 feet wide, and when a roll of rock fell it pinched the vein down to about 3 feet. He had sounded this rock and thought it safe, and was dressing off a shot when it fell. He jumped for the manway, but the rock shattered the manway props, crushing him between the timber and rib.

July 29, Brookside Colliery, George Forney, American, miner, was killed by a fall of rock. He was employed in No. 1 slope, No. 4 vein, and the vein there was hardly 4 feet thick and nearly flat so that buggies were used to run the coal from face of breast. He had fired a shot in the coal, which knocked out some props. He started to clean the coal away to replace the props, when the rock fell. He died before they were able to get him to the gangway.

August 17, Lincoln Colliery, Claud Smith, American, laborer, was instantly killed by a fall of coal. He was employed by his father, who was driving a buggy gangway far enough to start a chute so that the coal would run in a new breast or chute that they were going to start. Young Smith was cleaning up the coal that lay on the road, when the high side of the coal fell out, completely burying him.

October 24, Williamstown Colliery, Benjamin Woffenden, American, miner, was instantly killed by a fall of coal in Bear Valley slope. He had not worked in the face of his breast all day, but had been driving headings. He started to go to the counter above to obtain some timber and plank. He was crossing the breast from the west to the east side to go up to the next breast's manway, which was finished, and was nearly over when a large lump of coal slipped out of the face and caught him on the top jugular of the manway.

November 20, Brookside Colliery, Henry Perkins, American, miner, was instantly killed by a fall of slate or rock. He was employed at nearly the same place that Forney was killed on July 29, and was fully aware of the danger there. It appears that he had fired a shot before going back for dinner and on his return to the face he started to dress off the shot. His brother-in-law, who was near him putting up brattice, told him that he had better put in some more props. He replied, "all right," and started to come out, when the rock fell.

December 27, Brookside, Colliery, Anthony Demorchia, Austrian, repairman, was killed by a fall of rock and debris. He was about to drive a back-switch deeper and had drilled three holes in the face and had fired the hole nearest the west rib. He then went in to charge the second one. While trying the depth of the hole, one of the bars that had been loosened by the first shot fell out, allowing the loose rock above to fall on him.

Mine Cars

April 26, Lincoln Colliery, Harry Fry, American, repairman, who was employed at No. 1 slope at night repairing pulleys, was instantly killed by being run over by mine cars. About twenty minutes before his body was found the night boss spoke to him and he was then repairing a pulley. When the men came up with cars that they had loaded when cleaning slope, Fry's body was noticed in the center of the other track, having been struck by the cars coming down. His head had been crushed between the car axle and the top of pulley. The slope pitched only 29 degrees and there was plenty of room on the sides and between the tracks. It is believed he did not realize how close the cars were to him and was trying to finish the job at which he was working.

November 4, Brookside Colliery, Harvey Krall, American, driver, was found dead in the middle of the track in No. 5 vein gangway, 2nd lift east of timber slope. It is supposed that he slipped in trying to get back on the front bumper after putting in a sprag, and fell, his head striking the low rail. As the wheel had a sprag in he was caught below the nose and dragged a distance of 30 feet before his body was released. The mules and the car were standing 200 feet farther out the gangway.

Premature Blasts

May 21, Williamstown Colliery, Thomas Dolan, American, miner, was fatally injured by a premature blast in No. 2 shaft center, Lykens vein. He was driving the gangway and was charging a rock hole with dynamite, using for a tamping stick a piece of gas pipe with a wooden plug in the end. He became impatient because the charge did not go back easily and started to ram it back, when it exploded, blowing off his arms. He died in the Pottsville Hospital, May 22.

Falling Down Manway

August 8, Blackwood Colliery, Thomas Roak, Polish, miner, was instantly killed by falling down the manway. He had made a cartridge and was ready to tamp the hole. He called to his partner. His partner heard him moan and went over to his side of the breast, but could not find him. He then went down to the lower heading where he found Roak dead. He had evidently been overcome in some manner, lost his balance, and fell to the heading below, a distance of 238 feet.

Suffocation, Outside

January 12, Short Mountain Colliery, Cyrus Miller, American, watchman, was found dead on the floor of the engine house by the engineers when they came to work in the morning. He was employed as a watchman and a part of his duties was to have the locomotives ready to go out when the engineers came in the morning. When they arrived that morning they found the blowers on the engines, the place full of steam, and Miller lying on the floor dead. It is supposed that as the morning was a very stormy one, he had closed up the place, put the blowers on the engines and sat down in the cab to wait until the steam reached the desired point, and when it commenced to blow off it startled him, and he fell striking his head on the concrete floor, and become unconscious. As the blowers were still in full force, carbonic acid gas was generated, which settled along the floor and suffocated him.

March 1, Williamstown Colliery, George Brinkus, Slavonian, laborer, was smothered by a rush of culm at the separator's dirt bank. A stream of water is used to wash the culm down to the separator, working the place by night, as the water in the breaker is used by day. On this night the bank was frozen as it had rained and then turned cold and he was warned to be very careful and look out for rushes. The foreman, who was standing near to watch him, saw the rush coming and called to him to run, but instead of running away he ran directly in front of it and was knocked down and covered.

Miscellaneous, Outside

May 2, Williamstown Colliery, Henry Frederick, American, chain boy, was fatally injured by falling on a circular saw. As the scraper line that he was employed to tend had been stopped for repairs, he was sent with a companion to the mill to get a plank. Instead of walking along the road that ran outside of the shop, they carried the plank through the sawmill and blacksmith shop. While passing the circular saw, Frederick, who was in front, stumbled and fell across the saw. He died from his injuries at the Miners' Hospital, May 7.

Suffocation, Inside

June 15, Blackwood Colliery, Thomas Davis, American, starter, was found dead in chute No. 47, East Holmes vein, Blackwood tunnel. He was starting batteries and was last seen about 11 A. M. About 1.30 they went to look for him, and while they were drawing the coal out of the chute his body came through the draw-hole. He must have slipped and fallen into the chute while starting the coal above the heading. The coal following him completely covered him and he was suffocated.

December 10, Brookside Colliery, Andrew Schneider, Austrian, miner, was suffocated by an outburst of gas while he was standing in the center of his breast barring down top coal. His partner in the downcast manway was getting ready to start a heading to the outside breast, when the vein started to bump and the face of the breast was pushed out about 12 feet, blocking both manways and pinning Schneider fast in the breast. His partner was rescued without injury, but it took nearly 13 hours to reach Schneider's body.

December 26, Short Mountain Colliery, Richard Noble, American, driver, was found dead in chute, smothered by rush of coal. At 3.15 P. M. he took a car to No. 82 chute to load. It is supposed that not having enough coal to load the car he went up to the heading to start some coal down, and as the battery door was found open, he either slipped or stumbled into the chute while starting the coal and became wedged in the draw-hole. As the coal was fine he was smothered before help came.

Miscellaneous, Inside

June 18, Short Mountain Colliery, John C. Forney, footman, was fatally injured at the bottom of Lykens Valley slope by a pulley striking him. He had taken a car load of feed down to the bottom, unhitched the car and ran it back in the tunnel. After unloading the feed, he brought the car back to the bottom, put on the spreader and stepped on the front bumper. (Another man rang the bell.) The rope had dropped down along the side of the road. When the engineer started the car, the rope caught under the end of a cross tie and before they could stop it, flew up striking a prop that supported an overhead pulley and moved it far enough to allow the pulley to slide down the spreader chain and strike Forney in the stomach. He died from his injuries the same afternoon.

CONDITION OF COLLIERIES

LYKENS VALLEY COAL COMPANY

Short Mountain Colliery.—Ventilation and drainage fair. Condition as to safety good.

SUMMIT BRANCH MINING COMPANY

Williamstown Colliery.—Ventilation and drainage fair. Condition as to safety good.

PHILADELPHIA AND READING COAL AND IRON COMPANY

Brookside Colliery.—General condition good. Ventilation and drainage good. Condition as to safety good.

Lincoln Colliery.—General condition good. Ventilation and drainage good. Condition as to safety good.

Good Spring Colliery.—Condition excellent. Ventilation and drainage good. Condition as to safety good.

LEHIGH VALLEY COAL COMPANY

Blackwood Colliery.—General condition good. Ventilation and drainage good. Condition as to safety good.

IMPROVEMENTS

PHILADELPHIA AND READING COAL AND IRON COMPANY

East Brookside Colliery.—A coal and water shaft head frame has been erected at the new shaft. The tracks at the top of the shaft have been finished. The shaft is now being used as a permanent hoistway for coal and water. A trough line was erected to carry water from the shaft to West Brookside for the purpose of washing the coal at the breaker. This line is 9,000 feet long.

Tunnel has been started on the 2nd lift to connect the No. 5 vein gangway with the shaft. Tunnel has been driven 10 feet.

Fan is being erected on the Lykens Valley No. 4 vein to ventilate the east side workings.

A set of return tubular boilers is being erected.

West Brookside Colliery.—No. 4 Basin slope sunk from No. 4 slope level to the underground level and connected to the slope below this point. This will make one hoist to No. 4 slope and will do away with the underground slope.

Turnout is being made at the top of the slope.

8¼ inch bore hole drilled at this point from the surface, 732 feet, to be used for bell wire, telephone, etc.

Another 8¼ inch hole is being drilled for a rope hole and is now down 230 feet.

Good Spring Colliery.—Tunnel from Skidmore to Buck Mountain, No. 1 slope, 2nd lift, east side, has been driven 253 feet.

Tunnel Buck Mountain to Skidmore, No. 3 slope, 1st lift, has been driven 118 feet.

Tunnel from Mammoth to Bottom Bench, No. 1 slope, 3rd lift, has been driven 31 feet.

12 inch bore hole has been drilled for steam for 3rd lift pumps, 682 feet.

Air compressor erected.

Tunnel on 2nd lift, west side, No. 1 slope, from the Skidmore to the Buck Mountain, has been re-opened and is now stopped at 225 feet.

Tunnel is being driven at No. 1 slope, 2nd lift, from Holmes to the Diamond, and is now 302 feet long.

Lincoln Colliery.—A tunnel driven on the east No. 4 vein gangway, 4th lift, to the No. 5 vein, 460 feet long.

An electric pumping plant has been installed at the New Lincoln to furnish fresh water for boilers.

A trial slope on No. 2 vein, west of colliery, has attained a depth of 515 2-3 yards and is still being sunk.

A set of return boilers installed.

50,000 gallon fresh water tank erected.

Air compressor erected.

A slope is being sunk in the No. 5 vein, below 6th lift, and has reached a depth of 186 1-3 yards.

10 inch bore hole is being drilled for a rope hole for No. 5 vein, inside slope, and has reached a depth of 48 feet.

Valley View Colliery.—Tunnel driven in Ney's drift from the Skidmore to Mammoth vein, a distance of 141 feet.

A water tunnel is being driven to West Brookside Colliery to drain the water of the upper lift. This tunnel will be 2550 feet long when completed, and will cut all the veins from the Tracy to the Lykens Valley No. 5 vein. The tunnel is now in 440 feet.

An air line has been erected from the compressors at West Brookside to the water level tunnel, a distance of 7670 feet.

LEHIGH VALLEY COAL COMPANY

Blackwood Colliery.—Blackwood tunnel has been extended a distance of 550 feet cutting the Buck Mountain and the Lykens Valley veins.

No. 1 East Cross Cut tunnel was driven from the Orchard to the Skidmore veins, total length about 600 feet.

Cross Cut tunnel was driven on the Woods' level from the Holmes to the Skidmore veins, a distance of 250 feet.

A 12 foot ventilating fan erected at the Dundas tunnel, and enclosed in a frame building, covered with granite roofing.

A 100 H. P. tubular boiler set up to supply steam for this fan.

A new operation has been opened about one mile east of the breaker, to be known as No. 4 tunnel. Distance from the surface to the face at the close of year was 100 feet.

Blacksmith shop 8x10 feet, foreman's office, 12x16 feet, wash house, 18x20 feet, and powder house, 8x10 feet, all frame buildings, erected at colliery.

SUMMIT BRANCH MINING COMPANY

Williamstown Colliery.—Removed No. 3 slope hoisting engines from inside and installed engines on the outside; also steam line from boiler house to hoisting engine.

Water line through tunnel from No. 2 shaft to breaker.

One new 2500 gallon tank for hoisting water from No. 2 shaft.

Signaling and telephone line for No. 2 shaft.

Empty car return tunnel in No. 2 shaft, also water and air courses.

White Ash.—Airway and air shaft for Bear Valley slope and No. 2 shaft.

Column, steam line and pump house in Bear Valley slope.

Tunnel from No. 9 to No. 11 veins.

Big tunnel from No. 1 shaft bottom to Bear Valley slope extension.

Electric haulage to No. 1 shaft.

Short Mountain Colliery.—Considerable development work has been done in re-opening the White Ash workings in Bear Gap tunnel, besides the building of a power plant and the installation of a complete electric haulage system.

Two 18x36x12x36 foot compound condensing Duplex pumps were installed, one at No. 2 gate and one at No. 3 level, which complete an entire change in the pumping system.

Extensive new inside work, such as tunnels, planes, airways, traveling ways, water courses and turnouts, has been done.

No. 4 slope in course of extension.

At Short Mountain Washery another locomotive boiler was installed and placed in operation, as well as a new bucket conveyor line to take the place of elevator line.

Child Labor

During the year by special direction of the Chief of the Department, I made a thorough investigation as to the number of boys employed in and about the collieries of my district, and am pleased to report that I do not believe there is at present a single boy employed inside the mines under sixteen years of age, at least I found no boy who seemed to be under sixteen. In the breakers and washeries I found seven who seemed too small to be fourteen years of age, but four of them produced indisputable proof that they were old enough to work, while the other three never came back again to work. During this investigation I was afforded every courtesy and help by the officials of the coal companies in my district.

First Aid Corps

During the year the Lykens Valley and Summit Branch Mining Companies established first aid corps in their several mines and employed G. M. Stites, M. D., of Williamstown, to take charge of the several hospitals in their mines and instruct the men as to their duties in case of accident. I was pleased to see the interest taken by the men when I had the pleasure to attend one of the Doctor's lectures.

The Philadelphia and Reading Coal and Iron Company still maintain their high standard under the careful supervision of Major G. H. Halberstadt, M. D. One case of particular interest came under my personal observation. A man who was rendered unconscious by being buried under a rush of coal was revived by artificial respiration and was able to return to work in a day or two. Under the old methods he would have died simply because the men did not know what to do to revive him.

The Lehigh Valley Coal Company are making a move in this direction, but have not made any report as to the efficiency of their corps.

Mine Foremen's Examinations

The annual examination of applicants for certificates of qualification as Mine Foremen and Assistant Mine Foremen was held in Union Hall, Pottsville, May 8 and 9. The oral examination was held in Tremont and Lykens.

The Board of Examiners was composed of the following members: Hood McKay, Superintendent; John W. Kniley, Miner, Lykens; William James, Miner, Williamstown; Charles J. Price, Inspector, Lykens.

The following applicants were granted certificates:

Assistant Mine Foremen

John Noel, John H. Batdorf, John A. Wolf, Charles E. Batdorf, Jacob Williard, Williamstown; Fred J. Luxton, Wiconisco; William L. McGann, Blackwood; Albert A. Unger, Muir.

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